

Review of the COAG Energy Council's *Gas Supply Strategy Implementation Plan for Collaborative Actions*

Steering Committee report to COAG Energy Council

June 2018



COAG
Energy Council

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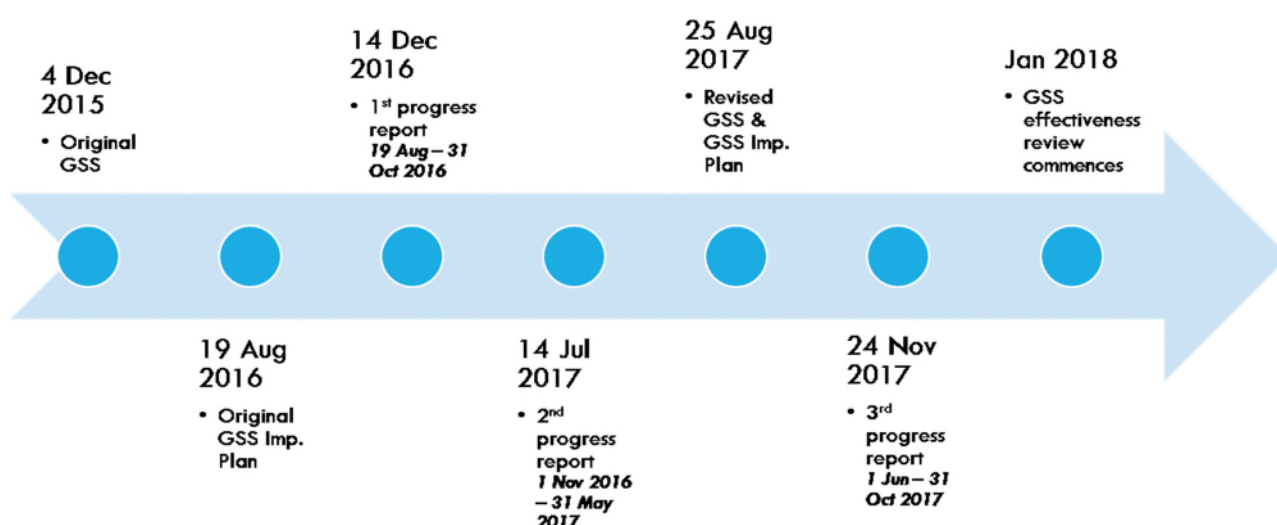
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INTRODUCTION

The COAG Energy Council Gas Supply Strategy (GSS) was released in December 2015, followed by the original implementation plan agreed in August 2016. Both the GSS and GSS implementation plan documents were amended in August 2017 and three progress reports have been published on the Energy Council's website to date.

The GSS was subject to an initial implementation period of 18 months, with the Energy Council able to add new collaborative actions at any time.

In August 2017, Energy Council Ministers agreed to officials undertaking an effectiveness review of GSS implementation. This is the first review of GSS implementation and focuses on jurisdictions' collaborative efforts during the period 19 August 2016 to 31 December 2017.



The Senior Committee of Officials (SCO) approved Terms of Reference for this review is at [Attachment 1](#).

The Review was undertaken by the GSS Implementation Effectiveness Review Steering Committee, chaired by the General Manager, Insights and Evaluation Branch of the Australian Government Department of Industry, Innovation and Science (DIIS) with jurisdictional representatives from the Upstream Petroleum Resources Working Group (UPR), Resources Policy and Engagement Working Group (RPEWG) and the Geoscience Working Group (GWG). A literature review and separate government and external stakeholder workshops were held to inform the Steering Committee's consideration of issues. The UPR Secretariat, with advice from the DIIS Evaluation Unit, supported the Steering Committee and led the report drafting process to reflect jurisdictional input and feedback along the way.

Of the 34 associations, gas companies, local Councils and independent organisations approached to participate in the consultation process, 10 external stakeholder organisations accepted the invitation. The public discussion paper consultation process used in April 2016 to inform development of the original GSS Implementation Plan attracted five submissions from gas companies and associations only, therefore the workshop consultation approach represents an

improvement in the level and breadth of stakeholder feedback obtained to help inform future Energy Council decisions.

This report is to be presented to Energy Council in August 2018 and provides the Steering Committee's collective view on:

- how implementation has progressed to date
- continuation of the GSS
- recommendations on how future implementation efforts should proceed.

The Chair of the Steering Committee wishes to express gratitude to all jurisdictions, external stakeholders, the UPR Secretariat and the DIIS Evaluation Unit for dedicating their time, collective knowledge and expertise to ensuring this review was robust and provides evidence-based advice to Ministers.

EVALUATION FINDINGS

Strategic Policy Alignment

Is the GSS Implementation Plan consistent with the achievement of the COAG Energy Council's Gas Market Vision?

Finding 1: The GSS Implementation Plan remains consistent with the achievement of the COAG Energy Council Gas Market Vision, including the recently agreed *Peak Electricity Demand - Gas Supply Guarantee*.

The COAG Energy Council *Australian Gas Market Vision*¹ recognised the significant transformation occurring in Australia's gas markets and the need for governments to guide gas market development and provide certainty for all stakeholders.

The Council's vision is for the establishment of a liquid wholesale gas market that provides market signals for investment and supply, where responses to those signals are facilitated by a supportive investment and regulatory environment, where trade is focused at a point that best serves the needs of participants, where an efficient reference price is established, and producers, consumers and trading markets are connected to infrastructure that enables participants the opportunity to readily trade between locations and arbitrage trading opportunities.

Source: COAG Energy Council Australian Gas Market Vision, 2014

The vision specified 12 specific outcomes and the addition of new actions to the Australian Gas Market Development Plan to improve visibility and accountability. One of these actions was to pursue cooperation on the development of a gas supply strategy, which informs communities and facilitates the responsible development of gas resources.

The COAG Energy Council's GSS and GSS Implementation Plan for Collaborative Actions are therefore a direct outcome of the Vision and aim to achieve several of the Vision's outcomes,

¹ <http://www.coagenergycouncil.gov.au/publications/coag-energy-council-australian-gas-market-vision>

namely:

- **Outcome 1:** Improvements are made to the regulatory and investment environment so that gas supply is able to respond flexibly to changes in market conditions.
- **Outcome 2:** A 'social licence' for onshore natural gas development achieved through inclusion, consultation, improving the availability and accessibility of factual information relating to resources projects, and rigorous science to ensure that the concerns of communities will be addressed.
- **Outcome 10:** Regulation of gas supply and infrastructure is appropriate and enables participants to pursue investment opportunities, in response to market signals, in an efficient and timely manner.
- **Outcome 11:** Accountable, timely reforms that have the confidence of stakeholders.
- **Outcome 12:** Stakeholders have increased opportunity to engage with and provide perspectives and expertise into reforms.

The Steering Committee considers that the responsible development of gas resources is a fundamental precursor to facilitating a responsive wholesale gas market. In the absence of additional commercial solutions (e.g. LNG imports) and demand side responses to reduce gas consumption, if further upstream gas development is not pursued/allowed then liquidity will be capped to availability of existing supply options at a given time.

The UPR/RPEWG/GWG workshop participants raised the questions of whether the GSS should:

- be integrated into a wider gas strategy that incorporates pipelines, markets, transparency and how these cross over and complement each other
- build in the broader supply chain, i.e. reflect how gas feeds into electricity supply, and bring together under energy.

External stakeholders consider that:

- GSS implementation is a niche within broader gas market reforms, which needs to be viewed and evaluated in the context of the broader reform process and issues.
- risks will be introduced if context/relationship between GSS implementation and other gas market reform priorities diverge or pull against each other's objectives/actions.

The Steering Committee notes that the GSS already acknowledges its linkage with the COAG Energy Council's *Gas Market Reform Package*², for which most elements are being implemented by the Gas Market Reform Group (GMRG) and/or Gas Major Projects Implementation Team (GMPIT). Further, the Australian Government and industry agreed to the *Peak Electricity Demand - Gas Supply Guarantee*³ in March 2017. This requires producers to guarantee that gas will be available to meet peak demand periods in the National Electricity Market (such as during heat waves) and provides for the Australian Energy Market operator (AEMO) to direct the market accordingly.

The Steering Committee also notes that a Resources 2030 Taskforce has been established by the Australian Government to inform the development of a Resources Statement. The Resources Statement will outline a long-term vision for a competitive and sustainable Australian resources sector to 2030 and beyond.

² <http://www.coagenergycouncil.gov.au/publications/coag-energy-council-gas-market-reform-package>

³ <https://www.pm.gov.au/media/measures-agreed-cheaper-more-reliable-gas>

Several recent COAG Energy Council communiques state that the Council’s highest priority is “ensuring the security, reliability, affordability and sustainability of the electricity market whilst working towards a lower emissions future”. The Steering Committee considers that the role of gas and security of gas supply is critical to helping maintain stability in the national energy market. The Australian Energy Market Operator makes a similar statement in its 2017 Gas Statement of Opportunities report:

“Gas-powered generation (GPG) is vital to continued security of electricity supply as the National Electricity Market (NEM) transitions to lower emission targets. A reliable supply of gas for GPG is critical, at a time when withdrawal of coal-fired generation in the NEM is increasing reliance on GPG to maintain reliable and secure electricity supply and meet emissions target reductions.”

In addition to the GSS Implementation Review Report, Energy Council Ministers will consider the specific details of the National Energy Guarantee’s design in August 2018.

Appropriateness

Are the objectives of the GSS Implementation Plan still appropriate or do they need further review?

Finding 2: The objectives of the plan are still appropriate but the connections between the actions and the objectives would be more clearly articulated by setting them out in the form of a program logic diagram, as outlined in Figure 1.

The GSS Implementation Plan includes actions that can be undertaken collectively by jurisdictions, and that can complement unilateral jurisdictional actions. These agreed actions contribute to the COAG Energy Council’s overarching objective for the GSS, which is to ensure the nation’s energy needs are met through maximising the benefit to the Australian community from the responsible development of gas resources. The fundamental requirements to meet this objective are to increase community confidence and trust in regulatory frameworks and to provide certainty for industry and communities in areas where gas development is allowed to proceed – these needs have not fundamentally changed.

As new gas developments require appropriate and rigorous regulatory frameworks and developments can typically take five to seven years (or more) to progress from exploration to production, the intended outcomes of the GSS focus on:

1. Greater collaboration on improving information resources and sharing knowledge on scientific, technical and regulatory issues
2. Helping to determine the role that onshore gas (conventional and unconventional), offshore gas and underground gas storage plays in individual jurisdictions
3. Assisting gas supply to respond flexibly and responsibly to market conditions
4. Assisting jurisdictions in responding to community concerns about potential local impacts of gas development.

The GSS outlines five medium term outcomes, intended to arise from implementation of collaborative actions:

1. Better informed decision-making and community discussion on gas development activities
2. Reduced reporting costs for industry

3. Improved accessibility and usability of relevant data
4. Improved knowledge of environmental impacts and opportunities of gas projects for the benefit of the industry, community and public
5. Stakeholders better informed about the rigorous activities undertaken by government in regulating the gas industry.

The four Opportunities for Collaboration stated in the GSS (as amended August 2017) provide the broad themes/remit for the individual collaborative actions within the GSS Implementation Plan:

1. Improving information on gas reserves and production potential for onshore conventional and unconventional gas, offshore gas, and potential underground gas storage
2. Improving public availability and accessibility of rigorous science and factual information on all types of gas sources and extraction methods
3. Consideration of leading practice regulatory frameworks that effectively manage the risks and address issues for onshore conventional and unconventional gas, offshore gas, and underground gas storage
4. Supporting leading practices in industry for responsible development of onshore conventional and unconventional gas, offshore gas, and underground gas storage.

Participants at the UPR/RPEWG/GWG workshop in February 2018 did not propose changes to the GSS's objectives or outcomes, however suggested there is a need to bed down an agreed program logic that ties actions together and shows how they contribute to the intended outcomes.

External stakeholders observed that GSS implementation started at a constrained position, given jurisdictional policies and drivers, and this led to a narrow set of objectives and collaborative actions. They also acknowledged it is hard to demonstrate a causal link between collaborative actions and outcomes as there are lots of external moving "puzzle pieces", including industry learning, oil price movement impacts on investment decisions and parity pricing, different domestic supply policies, and other bilateral/unilateral jurisdictional work underway.

External stakeholders consider there are early indications that short term outcomes are being achieved. They offered a broad range of views about whether GSS Implementation is making a broader impact and/or if the GSS's medium term objectives were starting to be observed. On balance, external stakeholders consider that:

- **There is a difference in opinion about whether decision-making and community discussion on gas development activities has improved (or not):** high media attention of, and the motivational impact on operators from, the introduction of the Australian Domestic Gas Security Mechanism (ADGSM); the conduct and outcome of the most recent Northern Territory scientific inquiry into hydraulic fracturing; jurisdictional restrictions on exploration and development still in place; level of community sentiment about gas development has stayed same but anti-development groups are being drawn into science of debate now and, in context of NT Scientific Inquiry, being forced to apologise for their conduct.

- **Industry reporting costs have worsened, but is the trade-off in improving accessibility and usability of data**, mainly due to: Australian Competition and Consumer Commission (ACCC) inquiry and Gas Bulletin Board reporting burden increases; difficulty in fulfilling reporting requirements where Commonwealth and State licencing conditions differ; industry is asked to provide same information twice because jurisdictions are at times restricted from sharing information.
- **Accessibility and usability of data is improving** for example through progressive public release of Geoscience Australia's precompetitive data, Gas Industry Social and Environmental Research Alliance (GISERA) and Bioregional Assessments Program research; the Gas Bulletin Board information improvements currently underway; and introduction of real-time environmental data at the jurisdictional level (e.g. fugitive emissions data in Queensland).
- **Knowledge of environmental impacts and opportunities of gas projects for the benefit of the industry, community and public is improving** due to information and communications activities by multiple players (GISERA, regulatory agencies, industry, Queensland Gasfields Commission, various inquiries) and improved industry knowledge arising from on-the-job learning and experience that has identified production issues and solutions.
- **Stakeholder awareness of the rigorous activities undertaken by governments has stayed the same if looking at national perspective, but slightly improved in some jurisdictions** primarily because of media attention around the introduction of the ADGSM, positive efforts by South Australian government and Queensland Gasfields Commission work with communities.

Whilst external stakeholders did not propose changes to the GSS's objectives or outcomes, they consider the GSS objectives have a cascading flow and these relationships/links could be expressed more clearly in a diagram.

The Steering Committee has developed a program logic diagram model (**Figure 1**) to help illustrate the relationships between the GSS's short and medium term objectives and outcomes. **Table 1** illustrates the link between collaborative actions and intended short term outcomes, as described in the program logic model.

FIGURE 1

COAG ENERGY COUNCIL GAS SUPPLY STRATEGY - Program Logic

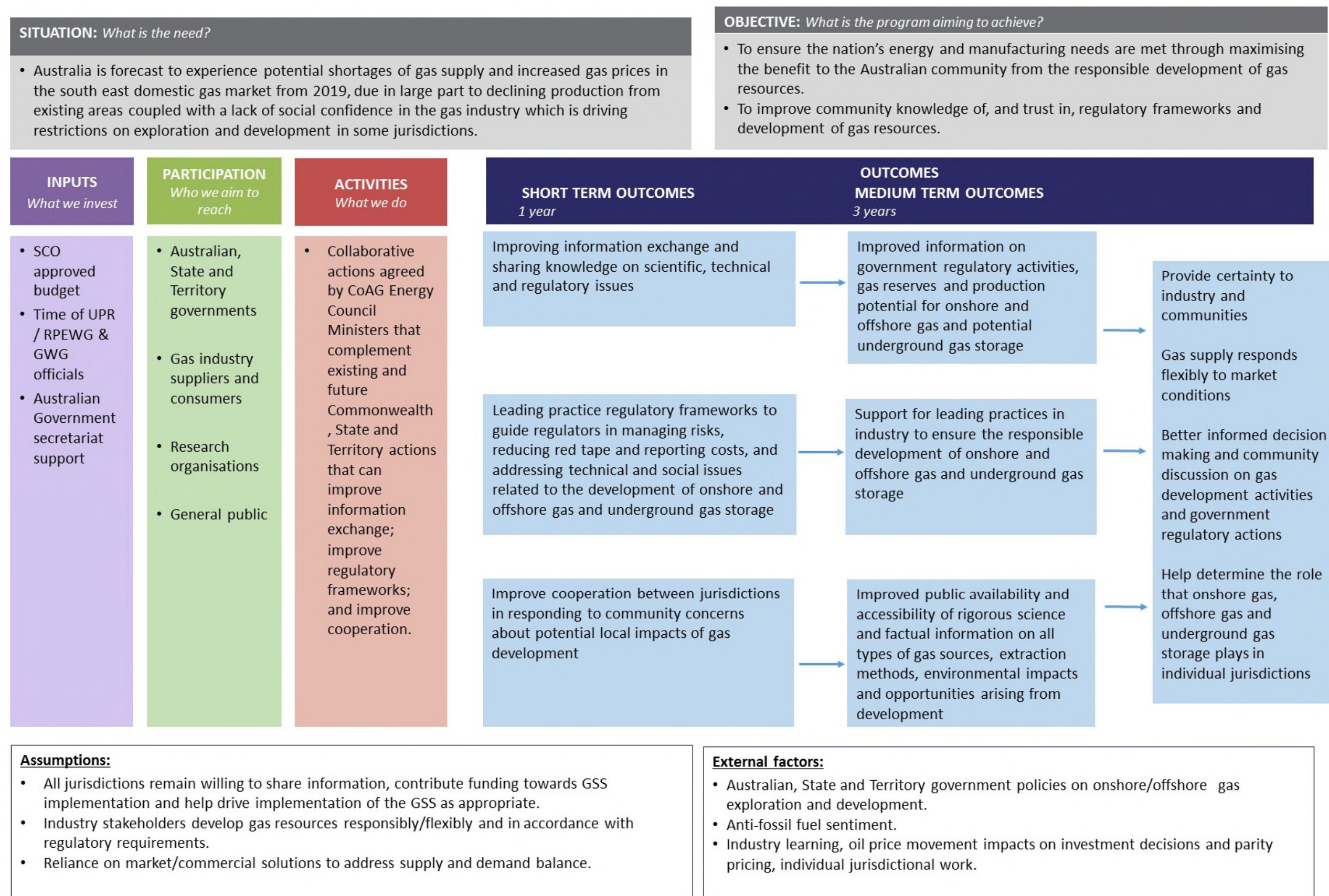


TABLE 1 – Linkages between collaborative actions and intended outcomes

	Improving information exchange and sharing knowledge on scientific, technical and regulatory issues	Leading practice regulatory frameworks to guide regulators in managing risks, reducing red tape and addressing technical and public trust/confidence issues related to the development of onshore and offshore gas and underground gas storage	Improve cooperation between jurisdictions in responding to community concerns about potential local impacts of gas development
CA#1 Ensure that pre-competitive science and geological programs, including petroleum and water, continue to be developed in consultation with industry and other relevant stakeholders.	★	★	★
CA#2 Agree on detailed geoscience data standards to support inter-operability of data management systems, reduced submissions costs, and enhance data search and integration capability for exploration study analysis and interpretation.		★	★
CA#3 Define programs that will enhance the characterisation of interactions between hydrocarbon and water resources, and the ready access to this information to increase inform project plans and stakeholders' knowledge.	★		★
CA#4 Look at options to develop a database to provide a mechanism for jurisdictions to share a nationally agreed set of statistical data on industry activity, including the addition of environmental data to improve public availability of baseline environmental and monitoring results.	★		★
CA#5 Agree on a statistical dataset that can be shared and compiled for UPR's Coal Seam, Shale and Tight Gas in Australia: Resources Assessment and Operation Overview including expansion to cover all onshore gas reserves, resources, drilling activity, well performance, and production data.	★		★
CA#6 Expand the Gas Industry Social and Environmental Research Alliance (GISERA) model into New South Wales and ensure arrangements/framework allows for other jurisdictions to join the alliance in the future.	★	★	★
CA#7 Coordinate the development of a common set of FAQs for use by all jurisdictions, including hosting a forum of representatives from relevant agencies such as Geoscience Australia and state and territory based regulators to consider and publish agreed facts and answers to FAQs.	★		★
CA#8 Continue efforts to encourage better community engagement, particularly in respect to land access case studies and community acceptance research through sharing communications tools and resources that have proven to be successful. This will include: hosting a forum and development of a better practice case studies document, which will include, CSIRO community engagement and acceptance research, review of jurisdictional approaches to native title issues and pursue better visibility of LARWG on COAG Energy Council website.	★		★

CA#9 Host a forum of Government officials to discuss pursuing Australian standard(s) on relevant onshore gas issues that will underpin productivity.			
CA#10 Develop and share work-flow diagrams to document the robustness and equivalence of upstream petroleum licensing and activity approval processes across Australian jurisdictions.			
CA#11 Review of the National Harmonised Regulatory Framework for Natural Gas from Coal Seams (NHRF).			
CA#12 Review of relevant Inquiry reports (e.g. into hydraulic fracturing) to identify common recommendations that could be addressed in the NHRF update and/or point to further work that could be done at a national level.			
CA#13 Lead development of a paper to seek national alignment of objectives for the regulation of shale and tight gas developments.			
CA#14 Support and promote the National Energy Resources Australia (NERA) and METS Ignited Growth Centres.			
CA#15 Develop broad principles for collaborative cross-jurisdictional programs to inform future offshore acreage releases and facilitate gas exploration and development in priority areas in Commonwealth offshore and State and Territory offshore waters.			
CA#16 Identify geological formations that have the potential to be developed for gas storage to improve security of gas supply.			
CA#17 Communicate information for landholders and communities about the onshore gas industry, including information to assist landholders in negotiating access to land for gas developments.			

Is the GSS Implementation Plan addressing relevant common jurisdictional scientific, regulatory and information needs?

Finding 3: The plan is still addressing relevant common jurisdictional scientific, regulatory and information needs. While amendments have been made during its life, it has not fully reflected changes in the market environment and there are opportunities to amend the collaborative actions to make them more relevant to the current context.

The GSS was created as a flexible framework – jurisdictions participate as much as their policy and regulatory settings allow and Energy Council Ministers can agree to new collaborative actions at any time. This has allowed the Implementation Plan to progress towards shared goals, although the differences in Commonwealth, State and Territory policy positions and regulatory responsibilities have had some impact on the quantity and quality of collaborative actions that could be agreed at particular times.

The Steering Committee notes that the GSS has, since its inception, included the acknowledgement/caveat that:

Individual jurisdictions will determine their level of participation in this gas market development work and how they will use the outcomes of this strategy. Council members will continue to share information and experiences, regardless of individual government policy positions.

All jurisdictions have engaged in collaborative actions to the extent to which the action is compatible with individual state/territory legislation and policy at the time.

In August 2017, the Gas Supply Strategy was amended by Council to recognise onshore conventional gas more explicitly and include offshore gas and underground gas storage, as part of a more holistic approach to national gas supply.

Throughout the implementation phase, and as reconfirmed at the UPR/RPEWG/GWG workshop, jurisdictions have regularly advised of individual and/or bilateral additional actions that are complementary to, or consistent with, the GSS Implementation Plan. The three GSS Implementation progress reports published on the COAG Energy Council's website⁴ demonstrate these efforts.

External stakeholders consider the GSS is an artefact of time and given some jurisdictions are exempted from particular actions, the ability to achieve the GSS outcomes is constrained. The Steering Committee notes this commentary, however considers that GSS Implementation is informing relevant common jurisdictional scientific, regulatory and information needs.

External stakeholders did not suggest any changes to the descriptions of the four Opportunities for Cooperation but suggested prioritising **Improving public availability and accessibility of rigorous science and factual information** and **Improving information on gas reserves and production potential** more to help facilitate better community discussions and informed decision making in the short term.

⁴ <http://www.coagenergycouncil.gov.au/publications/coag-energy-council-gas-supply-strategy-december-2015>

Specific external stakeholder suggestions in regards to collaborative efforts to prioritise include:

- further encouraging/enabling the national expansion of the Gas Industry Social and Environmental Research Alliance (GISERA) to help build base level of information within jurisdictions.
- improving consultation with, and developing targeted information for, non-gas industry stakeholders and particular regions.
- encouraging jurisdictions to jointly undertake pre-competitive geoscience and environmental research in basins that cross state borders to:
 - improve knowledge of basin-level geology, gas resource potential, baseline environmental conditions and potential environmental impacts
 - inform consideration of consistent regulatory conditions on both sides of the border for future gas projects.
- ensuring the shale gas development debate is informed by facts and the regulatory regime is ready prior to future industry activities taking place (i.e. lessons are learnt from coal seam gas development debate/history).
- improving data and information sharing between jurisdictions, to reduce the number of times/costs industry is approached to provide existing information.
- improving quality of information in state-level databases and consistency of environmental data collection between jurisdictions before pursuing establishment of a national database.

The following external stakeholder suggestions were made in relation to the Opportunity for Collaboration around ***Consideration of leading practice regulatory frameworks that effectively manage the risks and address issues for all conventional and unconventional gas resources:***

- In jurisdictions that allow CSG developments, all elements of the *National Harmonised Regulatory Framework for Natural Gas from Coal Seams* should be fully adopted and its use promoted to non-industry stakeholders to raise awareness of its existence.
- Allow opt-in and/or identify which areas (or projects) are subject to regulation that is consistent with the *National Harmonised Regulatory Framework for Natural Gas from Coal Seams*.

The Steering Committee notes external stakeholders' suggestions.

The gas supply/demand dynamic has changed over the initial implementation period

In 2015 and 2016, Australia's domestic gas market was undergoing a period of rapid transformation due to the combination of tightening domestic supply and international factors, including the effect of commencement of LNG exports from Queensland and low global oil prices. External stakeholders observed that while the GSS Implementation Plan was modified over the initial implementation period, it did not adapt fully to market changes.

As reported by the ACCC and the AEMO, the domestic gas market in Western Australia is well-supplied in the near term to 2025. The Northern Territory government does not anticipate any shortfall in the Northern gas market in 2018. However, gas supply for domestic customers in the east coast market remains tight.

Transparency of market behaviour and dynamics is improving, with the ACCC 2017-2020 gas market inquiry underway. Regular releases of ACCC inquiry reports and AEMO gas forecasting reports are refining the future gas supply and demand outlook across Australia's eastern,

northern and western gas markets.

As part of its broader strategy to ensure domestic consumers have sufficient gas, the Australian Government established the Australian Domestic Gas Security Mechanism (ADGSM) through the *Customs (Prohibited Exports) Regulations 1958* in July 2017⁵. The ADGSM allows the Government to limit LNG exports if necessary. On 3 October 2017, the Australian Government brokered an industry-led solution⁶ to cover any east coast shortfall in 2018 and 2019 – this action made the imposition of export controls in 2018 unnecessary.

In its December 2017 report, the ACCC observed efforts by east coast LNG projects to increase gas supply to the domestic market since September 2017. The ACCC now forecasts a surplus under the ‘expected domestic demand’ scenario of 20 PJ for 2018 and a potential shortfall of 33 PJ in the ‘upper band domestic demand’ scenario. The ACCC also no longer forecasts an ‘expected’ shortfall in 2019, however the upper band domestic demand scenario indicates an estimated potential shortfall of 24 PJ (compared with previous estimate of 102 PJ). Despite this improvement, the ACCC consider the market is still not sufficiently competitive and prices are still too high.

On 29 March 2018, AEMO released an update to its *2018 Victorian Gas Forecast Report*. The report highlights the need for additional gas production, alternative supply or other measures to meet Victoria’s natural gas demand beginning in winter 2021. AEMO provided its *2018 Gas Statement of Opportunities* on 23 June 2018 which found that no shortfall is expected in the east coast market before 2030 under its most likely Neutral Scenario. Together with the ACCC’s next interim report, these reports provide guidance on supply adequacy for 2019 and 2020.

Looking ahead, the Steering Committee considers the following watch points will provide important context for implementing the COAG Energy Council’s Gas Supply Strategy:

- the average volume of gas flows following the connection of the northern and eastern gas markets via the Northern Gas Pipeline⁷ in late 2018.
- the development of Arrow gas reserves in Queensland along with progress by APLNG, QCLNG and GLNG in their respective CSG developments.
- commercial investment decisions about the feasibility of LNG import and regasification facilities in addition to investment in new gas pipelines and/or pipeline capacity from Western Australia, Northern Territory and Queensland to supply south-east consumers.
- further changes to government policies arising from the completion of independent scientific inquiries and/or election outcomes.
- State and Territory government environmental approval decisions on gas supply development opportunities (e.g. Narrabri Gas Project).
- in the longer term, the release of new areas for onshore and offshore gas exploration to

⁵ <https://www.industry.gov.au/resource/UpstreamPetroleum/AustralianLiquefiedNaturalGas/Pages/Australian-Domestic-Gas-Security-Mechanism.aspx>

⁶ East coast LNG exporters committed to provide sufficient gas to meet any shortfall for 2018 and 2019, through good faith offers of gas on reasonable terms and not offer uncontracted gas for export unless equivalent volumes are first offered on competitive terms to domestic consumers. See details within *Heads of Agreement – The Australian East Coast Domestic Gas Supply Agreement*, <https://www.industry.gov.au/resource/UpstreamPetroleum/AustralianLiquefiedNaturalGas/Documents/Heads-of-Agreement-The-Australian-East-Coast-Domestic-Gas-Supply.pdf>

⁷ The NGP project will initially be capable of delivering relatively small volumes of gas (around 33 petajoules (PJ) per annum into a 700 PJ/a market), although this capacity can be expanded in the future if additional NT gas reserves can be commercially developed. The NGP will introduce a source of competition and support the development of a resilient and diverse gas market. However, it is unclear what effect the NGP will have on eastern market gas supply and prices.

replace existing projects as reserves are exhausted.

What does the GSS collaborative action #12 review of inquiry reports say about common themes or recommendations?

Throughout 2017, the Department of Industry, Innovation and Science led the collation of information and drafting of the *Comparison of recommendations from recent Inquiries into unconventional gas* paper. This paper was reviewed by UPR members and finalised in October 2017. Consultants engaged to undertake the leading practices and regulatory review components of the *National Harmonised Regulatory Framework for Natural Gas from Coal Seams* review (collaborative action #11) were provided with the comparison report for information.

The comparison paper identifies key recommendations from six inquiries in the previous two years:

- 2014 Independent Inquiry into Hydraulic Fracturing in the Northern Territory
- 2014 NSW Chief Scientist and Engineer Independent Review of Coal Seam Gas in New South Wales
- 2015 Inquiry into the Implications for Western Australia of Hydraulic Fracturing for Unconventional Gas
- 2015 Parliament of Victoria Legislative Council Environment and Planning Committee Inquiry into Onshore Unconventional Gas in Victoria
- 2016 South Australian Natural Resources Committee Inquiry into Unconventional Gas (Fracking) in the South East of South Australia
- 2016 Commonwealth Senate Select Committee on Unconventional Gas Mining (interim report)

At the time of developing the report, the 2017 Scientific Inquiry into Hydraulic Fracturing in the Northern Territory⁸ was underway therefore was not included in the paper.

Victoria advised that the Victorian Parliament's passage of legislation to permanently ban onshore unconventional gas activities meant action is not required in response to the majority of the 2015 Victorian Parliamentary inquiry recommendations.

Queensland advised that:

- it has not carried out inquiries into hydraulic fracturing.
- it has a robust, evidence based and adaptive regulatory framework for coal seam gas.
- it is satisfied with its regulatory framework and regularly considers whether changes are needed for its regulations to be best practice (e.g. the Gasfields Commission Review of 2016 that recommended some changes to the land access framework).

Table 2 provides a high level overview of the recommendation themes that were covered by jurisdictional inquiries. The key areas of focus included:

- social licence and local community impacts/veto rights (socioeconomic and health impacts, dispute resolution avenues)
- environmental protection and management (water, chemicals exposure/management)

⁸ The final report of the 2017 NT Hydraulic Fracturing report was released in March 2018. Further information is available at <https://frackinginquiry.nt.gov.au/>.

- and legacy/decommissioning issues)
- robustness of regulatory frameworks.

TABLE 2: Inquiry recommendation themes, by jurisdiction

	NSW	NT	WA	SA	Vic	C'th
Establishment of an Unconventional Gas Commissioner / Ombudsman			✓		✓	✓
Community / landholder benefits	✓		✓	✓	✓	✓
Health and safety	✓				✓	✓
Supporting research and knowledge transfer	✓	✓			✓	✓
Chemicals	✓		✓		✓	✓
Environment management including water and fracking	✓		✓	✓	✓	
Social licence	✓		✓	✓	✓	
Legacy issues, rehabilitation including well decommissioning	✓		✓		✓	✓
Bans and moratoria		✓				✓
Regulatory frameworks	✓	✓	✓	✓	✓	
Planning, including protection of agricultural land	✓					✓
Establishment of strategies to manage onshore gas	✓				✓	✓
Other	✓				✓	✓

The Steering Committee notes that the comparison paper will be revised to account for recommendations from the Northern Territory Hydraulic Fracturing inquiry report (April 2018) and the outcomes from the current Western Australian hydraulic fracturing inquiry (expected to be completed in late 2018).

Therefore, the comparison paper does not make recommendations about what national collaborative work should be pursued in the future. Instead, it summarises existing government responses, COAG Energy Council work and individual jurisdictional work that could address recommendations or inform consideration of potential further national collaborative work.

The comparison paper notes that GSS collaborative actions relating to:

- Gas Industry Social and Environmental Research Alliance (GISERA) outputs and other factual information, communication and community engagement efforts (i.e. CA's #6, #7, #8 and #17) are relevant to helping to address community and landholder concerns.
- Pre-competitive geoscience collaborative actions (CA's #1 and #3) are relevant to helping address concerns related to environmental (water) management and hydraulic fracturing.

External stakeholders consider that the most recent Northern Territory scientific inquiry has been the "best run" inquiry and the gas industry welcomed the prompt Government response and outcome. They also consider the Northern Territory is positioned for better community

discussions now because of the inquiry, which will help encourage informed decision making in the Northern Territory – and external stakeholders hope it will extend more broadly across Australia – in the future.

Is the GSS Implementation Plan still an appropriate strategy/ delivery mechanism to address common jurisdictional scientific, regulatory and information needs?

Finding 4: The plan remains an appropriate mechanism to ensure ongoing dialogue at all levels between jurisdictions and to encourage leading practice, national collaboration and consistency in the regulation of the gas industry. However, improving stakeholder awareness of the strategy and improving coordination across COAG Energy Council working groups is likely to raise its effectiveness.

External stakeholders had varying degrees of knowledge and awareness of GSS implementation, however did not express surprise or concern that GSS Implementation was not well known. Despite viewing GSS implementation as a niche within the broader COAG Energy Council gas market reform work and the general gas debate being lost as people are more focused on electricity market issues, external stakeholders consider there is value in continuing GSS implementation.

External stakeholders consider that conversations between jurisdictions on gas supply matters and different levels of collaborative actions are all valuable, however would prefer to see jurisdictional consensus on allowing future gas development to maximise benefits of this work.

The Steering Committee considers that the GSS Implementation Plan is an appropriate mechanism to ensure ongoing dialogue at all levels between jurisdictions and to encourage leading practice, national collaboration and consistency in the regulation of this vitally important industry to ensure the best possible outcomes for all Australians. The Steering Committee notes that coordination between the three Resources Working Groups could improve. The Steering Committee also consider communication between the Resources Working Groups and the Gas Major Project Implementation Team (GMPIT) could improve, to ensure officials are aware of broader COAG Energy Council gas market reforms being implemented.

Need for continued collaboration on common issues

UPR/RPEWG/GWG workshop participants consider there is a need for continued collaborative action, particularly on:

- improving baseline understanding of water/hydrogeology and environmental conditions on a basin-level, to help address community concern about the risk of depletion or contamination of aquifers
- improving strategies for community engagement and communications about regulatory activities (for example acreage release processes) and the outcomes/knowledge of baseline environmental information.

In respect to the baseline water/hydrogeology information needs, workshop participants suggested this may be an area that Geoscience Australia could lead, as not all jurisdictions have the same concerns with regards to water. External stakeholders noted that Geoscience Australia and GISERA precompetitive/baseline research work are very useful in building understanding of the location of gas resources and potential environmental/social issues to enable informed

decisions about the value and feasibility of developing particular resources. Whilst being supportive of this baseline work taking place, the Steering Committee notes that environmental regulators are better placed to undertake the work (i.e. it is outside of the Resources Working Groups / petroleum regulators remit).

External stakeholders highly value consistency in information across states, as it can help provide certainty to stakeholders. In other words, if consistency is not there, then confusion can arise and people question who is giving them truthful/correct information.

Government and external stakeholder workshop participants agree that improving the availability, accessibility, consistency and accuracy of information is crucial to help build community acceptance of the industry, and there will always be more information and work to do on this front.

External stakeholders acknowledged that community acceptance across Australia was at its lowest point in 2016. Community sentiment in some areas (e.g. Isaac Regional Council area) is still quite low. Whilst the forces that are pushing against function of industry (i.e. activism, protests) are not expected to decline, the external stakeholders observe there seems to be a general forward movement in community acceptance in areas that are directly impacted by gas exploration and production.

Whilst workshop participants questioned the relevance/effectiveness of FAQs as a communication tool, they noted the need to keep FAQs current through the existing six monthly review process. External stakeholders consider FAQs to be very important base information documents, and agree that FAQs need to be kept alive and allow for more topics to be added as needed. External stakeholders also commented that once FAQs are established, they can be communicated in different ways and should be promoted widely to provide community members with another trusted point/perspective of information. The Steering Committee notes that the Queensland Gasfields Commission and Agforce Queensland have a specific focus on information, communication and community engagement activities with landholders that could inform future Energy Council collaborative efforts in this space.

Government vs industry role in communicating information

UPR/RPEWG/GWG workshop participants highlighted that what happens in one jurisdiction impacts other jurisdictions. Jurisdictions have had the common experience of environmental groups filling the information void especially in the absence of governments and/or gas companies engaging effectively with local communities. This has resulted in a non-salvageable conversation about gas development in some areas.

The Steering Committee considers that the communication role for government should primarily focus on providing information about regulatory regimes. Industry is (or should be) responsible for communicating information about the specific benefits and potential impacts of its operations.

A study undertaken by the Institute for Governance and Policy Analysis⁹ shows that public confidence in institutions has declined across the board. This means there are challenges and opportunities in improving public trust in governments. UPR/RPEWG/GWG workshop

⁹ Institute for Governance and Policy Analysis. Australians Imagine their Democracy: The Power of Us, http://www.governanceinstitute.edu.au/magma/media/upload/publication/408_Democracy100-report-IGPA.pdf

participants noted that the GISERA model is good and people trust the CSIRO brand, however not all jurisdictions will have the budget to support its expansion.

External stakeholders reiterated the importance of bringing communities along the project development journey and providing trusted information. The Steering Committee agrees there will be an ongoing appetite for neutral, balanced scientific information for all stakeholders and ensuring that information is current, accurate and easily accessible will create important knowledge assets for the future.

APPEA confirmed that the industry acknowledges it has a role to play in communicating information. External stakeholders noted that companies have a vested interest so independent organisations (like GISERA) are crucial. External stakeholders consider GISERA's work to be vital in helping all stakeholders make future decisions based on rigorous science and suggest the Energy Council do more to support the national expansion of GISERA.

An external stakeholder made the following general comments about the current status of the gas debate:

- the quality of community discussion (from Ministers through to media and community) has gone backwards because the gas debate has been lost to focus on energy (electricity) issues.
- the narrative about the role of gas for industrial/factories and other non-electricity uses has quietened down
- not as many householders rely on gas for electricity purposes now and their discussion is focused on the role of solar panels (which is perceived to be more exciting).

External stakeholders also observed that Queensland's information and communication efforts are stronger than other jurisdictions and, in some stakeholders' views, it appears that Queensland is doing it in isolation.

The Steering Committee acknowledges that the Queensland experience of putting "boots on the ground" to talk to communities, with bipartisan policy agreement, was a successful approach. Queensland have staff on the ground through the QLD Gasfields Commission to listen and address farmers' issues with companies, which helps build relationships and trust with locals through face to face contact. UPR/RPEWG/GWG workshop participants noted that while intensive on ground efforts are costly, they are worthwhile considering more broadly if there is evidence that shows the process works. The Steering Committee notes that Queensland will share its learnings with other jurisdictions, including how the QLD Gasfields Commission model can assist, to enable jurisdictions to consider if the Queensland approach is appropriate for their own local situation.

The Steering Committee notes that most of the external stakeholders had some level of awareness about GSS Implementation efforts prior to being invited to participate in the consultation process, however a few had none or very little. This presents an opportunity for Energy Council to consider ways to increase awareness and communication with stakeholders in areas that will be developing gas in the future, i.e. not just areas already being developed.

**What are the likely consequences of not addressing the identified common needs?
What would have happened differently if the strategy had not been put in place?
What are the learnings?**

Finding 5: GSS implementation is considered a niche activity within the COAG Energy Council's broader gas market reform agenda. Jurisdictions have undertaken a wide range of measures alongside the plan and these would have occurred regardless of the plan's existence. However, the plan has facilitated information sharing that has improved jurisdictions ability to learn from each other. Given the connections between gas supply and other energy and environmental issues, it is important to ensure that activities in the plan remain within the COAG Energy Council's remit.

External stakeholders observed that jurisdictional moratorium/bans on exploration and development and the Australian Government's intervention on LNG exports seem to be more of a priority (and more visible) than GSS implementation. They also noted that in an ideal world, GSS implementation would have more importance, however consider it to be a niche activity within the Energy Council's broader gas market reform efforts and suggest there will always be macro reforms in train and competing priorities.

As described earlier, the *Comparison of recommendations from recent Inquiries into unconventional gas* paper provides an overview of existing government responses, COAG Energy Council work and individual jurisdictional work that could address the 2014-2016 inquiry recommendations.

The Steering Committee notes the following individual jurisdictional key actions/commitments are underway/still current and would have happened in the absence of the GSS implementation plan:

- Queensland:
 - Have established a Land Access Ombudsman (legislation passed September 2017). It provides a free and independent dispute resolution service to parties to existing Conduct and Compensation Agreements and Make Good Agreements.
 - Agforce and APPEA are doing model land access agreement work in Queensland.
 - Development of a new financial assurance framework that includes a fund for rehabilitation purposes (www.treasury.qld.gov.au/growing-queensland/improving-rehabilitation-financial-assurance-outcomes-resources-sector/financial-assurance-framework-reform/)
- Western Australia:
 - Mechanisms for negotiating access agreements with landholders have developed significantly since the 2015 inquiry, however the introduction of a statutory body may be considered in the future on the recommendation of the working group.
 - Efforts to prohibit the deliberate addition of BTEX compounds, and improve disclosure of chemicals used, in hydraulic fracturing fluids.
 - Encourages industry to reuse wastewater in accordance with existing policies.
 - Released a comprehensive guideline for public comment on groundwater monitoring in the onshore petroleum industry, which covers hydraulic fracture

- stimulation.
 - A whole-of-government approach to the release of water and environmental data under the State Environmental Data Library (SEDL) initiative.
 - To assess the feasibility of options including establishing a Petroleum Rehabilitation Fund or extending the Mining Rehabilitation Fund to petroleum related activities (or assess other models) in consultation with industry and community stakeholders.
 - Implementation of previously recommended regulatory reforms.
- New South Wales:
 - Improved benchmarking of compensation rates to provide a guide for landholders and establish Community Benefits Funds.
 - Pursued mandatory standards of training that applies to both CSG industry and government staff.
 - Established a whole-of-government environmental data portal which will become the centrepiece of a new and open approach to data on gas activities.
 - Improved governance and accountability of water data and water management, as well as enhance data monitoring and real time reporting to provide greater confidence to the community about impacts on water from various extractive industries.
 - Developed risk based approaches and tools to assist with assessing proposals, informing compliance activities and analysing risks.
 - Committed to harness expert advice and working closely with the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (IESC).
 - Agreed with the need for a comprehensive system to provide financial protections to cover potential coal seam gas related environmental risk.
 - Developed a plan to manage legacy matters and ensure no new matters are created through revised industry codes of practice and licence conditions.
 - Implementation of previously recommended regulatory reforms.
 - Completed a buy-back of petroleum (mostly CSG) exploration licences.
 - Implemented CSG exclusion zones around all residential areas and equine and viticultural critical industry clusters.
 - Implemented the *Strategic Release Framework for Coal and Petroleum Exploration*, which includes upfront consideration of environmental, social and economic factors and community consultation prior to the release of any new areas for gas exploration.
- South Australia
 - In 2010, increased global attention on South Australia's petroleum resources led the Government to establish the Roundtable for Unconventional Gas Projects in SA, it has grown from 212 member organisations in December 2012 to 1,155 member organisations in early 2018. In 2012 the Roundtable released its Roadmap for Unconventional Gas Projects in South Australia. An expanded roadmap for all oil and gas plays on- and offshore is planned to be concluded in 2019/20.
 - The Onshore Petroleum Centre of Excellence at Tonsley, the Mining and Petroleum Services Centre of Excellence, the ICT Roadmap for Minerals and Energy Resources Project, the South Australian Resources Information Gateway

- have been established over the last 5 years.
 - Two rounds of the Plan for Accelerated Exploration (PACE) Gas Grant program were completed in 2016-17 with a total of \$48 million directed towards accelerating South Australian gas production for local customers
 - Other reforms including a 'royalties for the regions' program are under consideration to encourage and support upstream petroleum investment and operations
 - South Australia's "one window into government" approach to regulation and facilitation, delivered through the Energy Resources Division, is recognised as enhancing productivity and contributing to social, economic and environmental benefits.
- Northern Territory
 - Introduced the Petroleum (Environment) Regulations.
 - Conducted an independent inquiry into hydraulic fracturing in shale reservoirs in the Northern Territory - the final report was released on 27 March 2018 and the Northern Territory government accepting the report and its recommendations.
 - Has established dedicated implementation teams in the Department of Chief Minister, the Department of Environment and Natural Resources and the Department of Primary Industry and Resources to manage the implementation of the Inquiry's recommendations.
- The Australian Government is yet to formally respond to the Senate Select Committee on Unconventional Gas Mining's interim report, however has:
 - Established a national register of chemicals and undertakes assessments of them (National Industrial Chemicals Notification and Assessment Scheme <https://www.nicnas.gov.au/>).
 - Established the Independent Expert Scientific Committee on Coal Seam Gas and Large Coal Mining Development (<http://www.iesc.environment.gov.au/>)
 - Initiated the initial Bioregional Assessments Program (<http://www.bioregionalassessments.gov.au/>)
 - In its 2017-18 Budget, included:
 - \$28.7 million over four years from 2017-18 to encourage and accelerate - the responsible development of onshore gas for the domestic market.
 - \$30.4 million over four years from 2017-18 to undertake scientific assessments on three prospective onshore unconventional gas sites to identify the potential impacts on water resources and other environmental assets. Geological and Bioregional Assessments will be completed in the Cooper Basin (SA and QLD), Isa Superbasin (QLD) and Beetaloo Sub-basin (NT).
- Victoria
 - Delivering the Victorian Gas Program (VGP), which will run from 2017 to 2020. The VGP will deliver a comprehensive program of geoscience and environmental research and related activities, as well as community engagement, resource planning and regulatory improvements, for onshore conventional gas, offshore gas and underground gas storage.
 - Legislated to permanently ban onshore coal seam gas activities, hydraulic fracturing, and the use of BTEX chemicals.

UPR/RPEWG/GWG workshop participants commented that at the time of developing the original GSS, governments were collectively scrambling to fill an information vacuum and to address community concerns about onshore gas development. The Steering Committee notes that the communication/information elements (except GISERA expansion) appear to be reactive.

An external stakeholder expressed concern that community energy literacy about the entire gas supply chain has not changed and that the industry is a complicated and challenging environment to understand, even for those that are involved in industry. This sometimes results in general understanding of where gas comes from and what it is used for getting lost in the emotion of whether – for example – a gas pipeline will cross through a specific property(ies).

UPR/RPEWG/GWG workshop participants provided the following examples of work that has progressed independently of the GSS:

- jurisdictions do their own geoscience work individually and bilaterally, independently of the GSS
- jurisdictions decide for themselves if there is enough data on particular basins, for their own regulatory purposes
- jurisdictions already manage water concerns in the context of environmental protection.

The Steering Committee notes that expansion of GISERA into New South Wales is a key outcome arising from GSS implementation.

To be more holistic in the future, the Steering Committee recognises the role the GSS Implementation Plan plays to continue to allow for, and explicitly acknowledge, individual jurisdictions' efforts to achieve the GSS objectives via complementary activities within their jurisdictions.

The Steering Committee also notes the following other key learnings:

- working groups struggle to implement actions that are outside of their responsibility/remit, therefore future implementation activities need to be carefully defined.
- there is an overlap between UPR and GWG responsibility for petroleum geoscience, as exemplified by the difficulty in progressing the development of a National Petroleum Exploration Strategy.
- GWG has consistent custodianship of mineral resource information across all jurisdictions. However this is not the case for onshore petroleum, where levels of responsibility vary between jurisdictions. This makes attaining a shared GWG vision / unity of purpose for onshore petroleum difficult.
- regular, early communication with communities by both government and the industry is important.

Effectiveness

Have the GSS Implementation Plan's collaborative actions met the key performance indicators and milestones?

Finding 6: Significant progress has been made on meeting key performance indicators and milestones across the plan, but some actions have not been completed as planned. This primarily reflects a lack of resources available in jurisdictions, which suggests that the actions themselves have relatively low priority and should be reconsidered. Lack of clarity over responsibility for delivery of actions across working groups has also contributed to delays and could be addressed through strengthened governance/oversight arrangements.

Table 3 provides a summary of the status of collaborative actions as at 31 December 2017. Detailed commentary is available in **Attachment B**. Of the 17 collaborative actions:

- five are completed
- four are substantially complete (more than half the milestones complete)
- five are partially complete (less than half milestones complete)
- three just commenced (in August 2017).

External stakeholders consider the collaborative actions are mostly “work in progress”. They also noted that the grammar and the ongoing nature of some actions/milestones would make it difficult to evaluate whether actions are, or ever could be, considered complete.

A key observation from the UPR/RPEWG/GWG workshop was that jurisdictions collaborate well, but not necessarily according to the directives of particular collaborative actions. The Steering Committee notes that some milestones and KPIs have been overtaken by changing government priorities and industry economics, and evolving community attitudes. However, the specific milestones/KPIs for some actions have not been met and the GSS progress reports refer to parallel/complementary work being undertaken by jurisdictions.

TABLE 3 – PROGRESS OF GSS COLLABORATIVE ACTIONS AS AT 31 DECEMBER 2017

	Just commenced (From 25 August 2017, too early to evaluate)	Partially complete (< half of milestones completed)	Substantially complete (> half of milestones completed)	Complete
#1 - Ensure that pre-competitive science and geological programs, including petroleum and water, continue to be developed in consultation with industry and other relevant stakeholders				
#2 - Agree on detailed geoscience data standards to support inter-operability of data management systems, reduced submissions costs, and enhance data search and integration capability for exploration study analysis and interpretation				
#3 - Define programs that will enhance the characterisation of interactions between hydrocarbon and water resources, and the ready access to this information to increase inform project plans and stakeholders' knowledge				
#4 - Look at options to develop a database to provide a mechanism for jurisdictions to share a nationally agreed set of statistical data on industry activity, including the addition of environmental data to improve public availability of baseline environmental and monitoring results				
#5 - Agree on a statistical dataset that can be shared and compiled for UPR's Coal Seam, Shale and Tight Gas in Australia: Resources Assessment and Operation Overview including expansion to cover all onshore gas reserves, resources, drilling activity, well performance, and production data (finalisation of report expected Q2 2018)				
#6 – Expand GISERA model into NSW and ensure framework/arrangements allow for other jurisdictions to join the Alliance in future				
#7 – Coordinate the development of a common set of FAQ's for use by all jurisdictions, including hosting a forum of representatives from relevant agencies such as Geoscience Australia and state and territory based regulators to consider and publish agreed facts and answers to FAQs.				FAQs published 27 June 2018
#8 - Continue efforts to encourage better community engagement, particularly in respect to land access case studies and community acceptance research through sharing communications tools and resources that have proven to be successful (Better Practice Community Engagement Handbooks completed and Case Studies published, but community engagement workshop not expected to be held)				
#9 – Host forum of government officials to discuss pursuing Australian standard(s) on relevant onshore gas issues that will underpin productivity				Individual jurisdictions will participate in further NERA-led work as appropriate.
#10 - Develop and share work-flow diagrams to document the robustness and equivalence of upstream petroleum licensing and activity approval processes across Australian jurisdictions.				
#11 - Review of the National Harmonised Regulatory Framework for Natural Gas from Coal Seams (NHRF) (consultant reports finalised November/December 2017)				
#12 - Review of relevant Inquiry reports (e.g. into hydraulic fracturing) to identify common recommendations that could be addressed in the NHRF update and/or point to further work that could be done at a national level				Update of document to occur following release of NT and WA Inquiry reports in 2018
#13 - Lead development of a paper to seek national alignment of objectives for the regulation of shale and tight gas developments (Energy Council approved Key Principles for the National Harmonised Regulatory Framework for Petroleum in December 2016)				
#14 - Support and promote the National Energy Resources Australia (NERA) and METS Ignited Growth Centres (Funding provided to establish growth centres and initial 10 year sector competitiveness plans released)				
#15 - Develop broad principles for collaborative cross-jurisdictional programs to inform future offshore acreage releases and facilitate gas exploration and development in priority areas in Commonwealth offshore and State and Territory offshore waters				
#16 – Identify geological formations that have the potential to be developed for gas storage to improve security of gas supply				
#17 - Communicate information for landholders and communities about the onshore gas industry, including information to assist landholders in negotiating access to land for gas developments				

Specific examples of reasons why some milestones were not completed

The development and implementation of the Resources Data Initiative stalled due to a lack of funding. UPR subsequently endorsed closure of the program in March 2018.

The FAQ forum (GSS collaborative action #7) did not proceed as the quote received in February 2017 for forum facilitation services was more than double the SCO approved budget allocation. This issue was discussed with UPR at its March 2017 meeting, where it was subsequently agreed to instead provide existing FAQs to the Secretariat for further consideration of an alternative approach. The agreed alternative approach involved DIIS collating jurisdictional information into a proposed FAQ document and consultation with UPR to settle wording prior to seeking SCO approval to publish the FAQs on the Energy Council's website. In January 2018, the QLD, NSW and WA SCO members provided feedback, which required further consultation with UPR members. A science communicator was engaged to ensure the FAQs were fit for general public consumption prior to obtaining UPR endorsement of the proposed final version on 21 March 2018. In April 2018, DIIS finalised permissions for image use and prepared FAQs for publication. SCO re-approval to publish was sought out-of-session in late April 2018 and following some further corrections, the FAQs were published on 27 June 2018.

The RPEWG's (then known as Land Access for Resources Working Group, or LARWG) December 2016 meeting minutes referred to the potential to hold the GSS collaborative action #8 community engagement forum in conjunction with UPR's FAQ forum in early 2017. However, the joint forum did not proceed because of the facilitation services quote being more than the SCO approved budget. UPR subsequently agreed to transfer some unspent funding from its budget to (then) LARWG for the purpose of a stand-alone community engagement forum, which LARWG agreed to top up with a transfer of funds from its other priorities and new monies. In May 2017, (then) LARWG discussed holding the community engagement forum at the same time as its planning workshop, aimed for July or August 2017.

However, given the Council's subsequent endorsement of new collaborative action #17 it was RPEWG's (LARWG) view that this would make CA#8 redundant and the stand alone forum did not proceed. Both CA#8 and #17 have community and communications elements in their description and the rationale for both is primarily to identify and address factors hindering access to land and to improve communication with communities to better prosecute the case for gas development. CA#17 will undertake a more comprehensive and targeted assessment of these factors across jurisdictions and deliver a package of information which will be of practical use by landholders and communities and assist in negotiating access to land for gas developments.

In regards to the approval process workflow diagrams work (GSS collaborative action #10), in October 2017, South Australia advised it could no longer lead implementation of the action due to other competing priorities. UPR decided to not seek funding to engage a consultant to undertake Steps 2 and 3. Instead, UPR agreed for UPR Secretariat to circulate jurisdictions' workflow diagrams to members for individual review/comparison to satisfy Step 4. UPR further noted that it may be able to draw on learnings from the National Harmonised Regulatory Framework for Natural Gas from Coal Seams review (GSS collaborative action #11) in respect to the characterisation of leading practice for co-regulatory assessment and approvals.

Following COAG Energy Council agreement in December 2016 to the *National Harmonised Regulatory Framework for Petroleum – Key Principles*, the biggest stumbling block in completing

GSS collaborative action #13 was the inability to obtain jurisdictional agreement to metrics on how the jurisdictions will roll out and report on incorporating these principles into their various legislation regulations and/or codes of practice. In October 2017, UPR agreed to explore whether jurisdiction's annual reporting processes already fulfil the requirements instead of developing lower level metrics. The UPR/RPEWG/GWG workshop participants observed that this has prevented completion of the final two milestones for GSS collaborative action 13 and given jurisdictional differences, the final milestone is unlikely to ever be completed.

Were the major delays in implementation material?

UPR/RPEWG/GWG workshop participants noted that the FAQs should have been an "easy win", but have taken a long time to produce (published 27 June 2018), largely due to delays in feedback from jurisdictions, delays arising from budget matters, structural changes and late decision to engage a science communicator to complete a readability edit of the proposed final text.

The lack of engagement of some GWG members on onshore gas matters and the overlap in responsibility between GWG and UPR around petroleum geoscience have been underlying causes for non-completion of collaborative actions and lack of outputs led or co-led by GWG. GWG has consistent custodianship of mineral resource information across all jurisdictions. However this is not the case for onshore petroleum, where levels of responsibility vary between jurisdictions. This makes attaining a shared GWG vision / unity of purpose for onshore petroleum difficult.

Administrative delays also impacted the implementation of the three collaborative actions, for which responsibility was originally allocated to GMPIT but subsequently transferred to UPR. An administrative solution was also required for a period of time for the Department of Industry, Innovation and Science (DIIS) to access funds from the Energy Special Account, which impacted on the timeliness of completing the development of FAQs and review of the National Harmonised Regulatory Framework for Natural Gas from Coal Seams in particular. The Steering Committee notes that every time a budget change is required, the working group members and/or Chair(s) involved need to approve the proposal. Where SCO out-of-session approval is required, a minimum two week consideration period also applies.

The Steering Committee notes that accountability for progressing/completing collaborative actions was not as strong as it could be. Given the number of and difference in jurisdictional policy positions there is inherent difficulty in obtaining consensus to finalise some milestones - the difficulty and delay in obtaining agreement on the final FAQ text is a clear example of this. The Steering Committee considers that milestone completion rates could improve if collaborative action timeframes are clarified, implementation is streamlined and an ongoing Steering Committee is established to closely monitor and guide future GSS implementation efforts.

Did the program have any unintended consequences (positive or negative)?

Finding 7: No unintended consequences were identified through the review.

GSS Implementation has helped improve and promote greater information sharing amongst jurisdictions, and within and across working groups. UPR, RPEWG and GWG officials have upheld this commitment to regularly share information about their jurisdictions' policy positions and experiences at formal working group meetings and out-of-session. A genuine willingness and effort at officials' level to collaborate as much as possible has been demonstrated, however resources in all jurisdictions have been significantly stretched at times and this has impacted on the capacity to focus on GSS implementation.

External factors (State/Territory inquiries and elections) and competing jurisdictional priorities and day-to-day responsibilities, will always have an impact on resource capacity within all jurisdictions to focus on COAG Energy Council priorities. External stakeholders also acknowledged macro reforms and competing priorities will always be part of the picture. In respect to GSS implementation, this has manifested in delayed responses to requests for input to progress collaborative actions, Secretariats repeatedly requesting overdue information/input, jurisdictions withdrawing offers to lead particular collaborative actions and rushed preparation of progress reports to the Energy Council.

Are amendments to, or new, collaborative actions required?

Finding 8: Given recently added new actions and outstanding actions, no new actions should be added at this time. The plan should be restructured to differentiate between broad strategic actions and discrete tasks and to focus on desired outcomes of the actions. Existing actions should be amended to clarify their objectives and responsibility for implementation, and make them more flexible for jurisdictions to adapt to their specific circumstances. Consideration of additional, new collaborative actions to encourage further gas supply should continue to take place at future SCO and Energy Council meetings.

The Steering Committee does not recommend additional new actions at this time. This is primarily due to the fact that three additional collaborative actions agreed to in August 2017 have just commenced and it is therefore too early to measure their impact or effectiveness in achieving the GSS objectives. Similarly, some of the existing collaborative actions also have milestones and KPIs that require action or assessment over the next few years.

The Steering Committee agrees with the UPR/RPEWG/GWG workshop attendees' suggestions of the following overarching changes:

- restructuring the implementation plan to differentiate between broad strategic actions and discrete tasks and to focus on desired outcomes of the actions.
- amending the wording of actions to:
 - clarify what they are designed to achieve, including amending milestones and KPIs where delays have impacted on the timeliness of implementation
 - ensure they completely fall within the purview / responsibility of the respective resources working group, for example to clarify the extent it should try to address water matters
- merging partially completed collaborative actions
- making the GSS implementation plan less prescriptive, so it instead provides a cohesive

policy directive which jurisdictions can then adapt to their circumstances.

The Steering Committee recommends the removal of completed actions and amendments to the other collaborative actions that are consistent with external stakeholder feedback and consistent with the proposed changes discussed at the UPR/RPEWG/GWG workshop. In addition, the Steering Committee also recommends the implementation plan should be amended to reflect that the Resources Data Initiative project recently closed¹⁰.

In addition to earlier comments about which Opportunities for Collaboration should be prioritised, external stakeholders suggest closer collaboration between jurisdictions and with external stakeholders (e.g. Queensland Gasfields Commission and Agforce) to leverage existing information and work together to improve communication of information and development of community engagement handbooks and/or activities.

A list of proposed GSS Implementation Plan 2.0 collaborative actions is provided in the *Recommendations* section from page 31. SCO and Energy Council should continue to identify and monitor opportunities for more ambitious cross-jurisdictional collaborative actions, in the context of GSS implementation, to encourage future gas supply.

Integration

Are the objectives of the GSS Implementation Plan and other UPR, RPEWG and GWG activities consistent?

Finding 9: The objectives of the plan are broadly consistent with UPR, RPEWG and GWG policy objectives, other working group priorities and the Resources Advisory Panel's agreed four themes for resources policy. However there are elements of some collaborative actions that rest outside of working groups' remit, therefore making it difficult to complete particular milestones and key performance indicators.

In January 2017, the Resources Advisory Panel (RAP) was established to provide strategic oversight of the COAG Energy Council's resources agenda. The RAP's Terms of Reference were approved by SCO in June 2017 and outline the following roles and responsibilities:

- Provide oversight of the Council's strategic priorities and opportunity for collaboration and communication between working groups.
- Provide guidance for the resources work program by highlighting activities it regards best align to strategic priorities set by the Energy Council and SCO. It provides a forum for the discussion of emerging issues and identification of gaps and overlaps within the work program.
- Where deemed appropriate to progress the work program, may establish project teams for a specific project within the agreed work program or by direction from SCO. Such project teams would likely embrace the work of more than one working group, and be time-limited with a specific outcome/output. The Panel is responsible for directing the project team and its disbanding on completion of the project.
- The Panel does not have an administrative function. The SCO sponsor provides the administrative function with respect to each working group and to act as the conduit for

¹⁰ UPR agreed on 21 March 2018 to close the project as, since Resources Data Initiative began in 2015, there has been a proliferation of websites and initiatives with similar objectives, and the rationale for continuing to pursue the project is no longer clear.

working group actions to progress to SCO and/or the Energy Council (refer to Protocol for the Supporting Architecture (Resources)).

The Panel agreed to use the following four themes to reflect the core building blocks and outcomes that resources policy should be driving towards:

1. Harnessing our Capability
2. Supporting People and Communities
3. Protecting the Environment
4. Encouraging Investment

These four themes provided the broad framework to consolidate the current and future work plans of the UPR, RPEWG and GWG. The RAP work plan priorities (as at April 2017) specifically mentions 12 of the 14 original GSS collaborative actions¹¹, of which:

- Seven GSS collaborative actions contribute towards all four themes (#3, #4, #5, #7, #9, #12 and #13)
- Three GSS collaborative actions contribute to two themes (#2, #10 and #11)
- Two collaborative actions relate to one theme (#1 and #8).

In October 2017, RAP members acknowledged there is clear overlap in the GSS implementation plan action items. It noted the need for a process for cross working group engagement to avoid duplication and possible inconsistent outcomes, and issues such as how to address closing action items and legacy items that are not of significant interest. This led to the incorporation of the UPR/RPEWG/GWG workshop consultation step in the review's Terms of Reference and is consistent with working group's ongoing efforts to identify priorities that will result in a more focused COAG Energy Council resources agenda.

The GWG is responsible for implementing collaborative actions 1 and 16, plus co-leading implementation of collaborative action 3 with UPR. Noting that Ministers agreed to collaborative action 16 in August 2017, there is little evidence to confirm that satisfactory progress has been made in implementing the other two actions. For example, the GWG's 2017 annual meeting minutes only briefly references the GSS within the context of, development of the *National Petroleum Exploration Strategy* – GWG members noted that “*gas seems to be a focus into the future recognising there is a need to work together*”. The GWG discussed the GSS Implementation Plan review at its 2018 annual meeting, with all members agreeing that GWG should only take carriage of actions and outcomes that were within its control. Subsequent to this meeting, the GWG suggested amendments to actions 1, 3 and 16.

The RPEWG is responsible for leading collaborative actions 8 and 17. The community engagement work under collaborative action #8 has progressed. However, for reasons already discussed earlier in the report, the workshop did not proceed. The communications work under collaborative action #17 is at an early stage of implementation, given Energy Council Ministers agreed to its addition to the implementation plan in August 2017 and aligns with all three RPEWG policy objectives of:

- ensuring that Australia's resources sector remains internationally competitive and attractive to investors, through the adoption of a responsible approach to exploration and resource development, and transparent and consistent regulation;

¹¹ CA #6 and #14 were not included as they were not being led by a Resources Working Group.

- ensuring that industry is able to maintain access to land for exploration and resource development; and
- ensuring Australians are confident in the regulation of exploration and resource development and appreciate the importance of these to Australia's economy and the net benefits to local communities.

UPR is responsible for leading the vast majority, 11 of the 17 GSS collaborative actions and the work is consistent with UPR's objectives to:

- optimise policy settings to reduce costs, attract and enable increased investment and community confidence in the sustainable exploration and development of Australia's upstream petroleum and offshore mineral resources.
- drive consistent and best practice regulatory frameworks and practice nationally.

Implementation of the GSS has been a major component of the UPR's work plan over the review timeframe, accounting for around 85 per cent of the UPR's identified priorities. Various GSS collaborative actions have been discussed, and related decisions, made at each of the UPR's three face-to-face meetings held throughout the initial implementation period. However, seven UPR-led collaborative actions remain incomplete (to varying degrees).

The RAP's Terms of Reference and membership would make it an ideal vehicle to drive coordination of GSS implementation across the three working groups. However in June 2018, the RAP Chair and RAP Secretariat proposed the idea to disband RAP as it had achieved its primary goal of setting a Resources agenda.

Subject to a SCO decision on disbanding the RAP in July 2018, the Steering Committee therefore recommends that a cross-jurisdictional steering committee, with membership from all working groups be established to provide a governance/oversight role for GSS implementation to:

- monitor and ensure timely completion of outstanding collaborative actions
- improve efficiency in developing, and quality of, the regular GSS implementation progress reports provided to SCO and Energy Council.

Are the GSS Implementation Plan collaborative actions consistent with actions being taken in individual jurisdictions?

Finding 10: Jurisdictions have implemented a range of actions that are broadly consistent with the plan.

The GSS progress reports published to date includes a separate section to acknowledge relevant individual jurisdictional announcements and gas development activities.

Where activities are complementary to GSS collaborative actions, these have been highlighted within the specific collaborative action commentary sections of the progress reports. For example:

- Geoscience Australia's \$100.5m Exploring for the Future Programme (2016-2020) – *collaborative actions #1 and #3*
- Victoria commissioning a 3D geological model of the onshore and offshore Otway Basin as part of the \$42.5 million Victorian Gas Program – *collaborative action #1*
- Northern Territory's \$26 million pre-competitive geoscience program Resourcing the

Territory (2018-2022) - *collaborative action #1*

- Resources Data Initiative (RDI) Project – *collaborative actions #2 and #4*
- Geoscience Australia, NOPTA and the Department of Industry, Innovation and Science examined petroleum data standards to assist the Offshore Petroleum Resource Management Review – *collaborative action #2*
- Australian Government’s Geological and Bioregional Assessments program – *collaborative action #2*
- South Australian Oil and Gas Roundtable Working Group 3’s (use water wisely) work programs – *collaborative action #3*
- Western Australia’s Interagency Science Needs Research Program – *collaborative action #3*
- South Australian Oil and Gas Roundtable Working Group 8’s work program and outcomes include FAQs and ‘THE FACTS’ sheets for Fracking and the Offshore Bight Basin – *collaborative action #7*
- Victoria’s establishment of a Stakeholder Advisory Panel, chaired by the Victorian Government’s Lead Scientist, which covers a broad range of views, including farmers, industry, local government and the community – *collaborative action #8*.

Performance Assessment

Are the key performance indicators for each collaborative action aligned with the objectives of the GSS Implementation Plan?

Finding 11: Key performance indicators for a number of actions could be improved to make them more specific and measurable.

The key performance indicators (KPIs) for each collaborative action relate specifically to completing the particular action’s milestones. As illustrated in **Table 1** (on pages 8-9), each collaborative action is intended to contribute towards one or more of the following three short term outcomes:

Improving information exchange and sharing knowledge on scientific, technical and regulatory issues	Leading practice regulatory frameworks to guide regulators in managing risks, reducing red tape and addressing technical and public trust/confidence issues related to the development of onshore and offshore gas and underground gas storage	Improve cooperation between jurisdictions in responding to community concerns about potential local impacts of gas development
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The UPR/RPEWG/GWG workshop participants observed that all jurisdictions collaborate well, but not necessarily according to the directives of the Collaborative Action. Participants also questioned whether the KPIs are the right ones to measure implementation accurately.

The Steering Committee notes that consistency with the SMART principles¹² varies across the existing collaborative action KPIs. Most KPIs identify a timeframe for completion and specific, measurable outcomes/outputs that are anticipated. However, with the benefit of hindsight, quite a few of the milestone/KPI dates were not realistic due to the reasons described in the *Effectiveness* section of the report. Some of the KPIs are also not specific enough - for example, how should “good representation/engagement” of working group members at a forum be measured? How can ongoing activities be evaluated/considered complete?

¹² S = specific, M = measurable, A = attainable, R = relevant, T = timely.

RECOMMENDATIONS

Based on the evidence collected throughout the review, the Steering Committee considers that implementation to date has progressed more slowly than anticipated in the Plan, but at a reasonable pace given the external factors and competing priorities outlined in this report. The Steering Committee agrees GSS implementation should continue, with closer monitoring and guidance from a cross-jurisdictional steering committee.

The Steering Committee's specific recommendations about how future implementation efforts should proceed are below.

- (1) The Steering Committee recommends an additional Gas Supply Strategy implementation period of two years to allow for meaningful progress to be made on outstanding collaborative actions.
- (2) To improve accountability in completing collaborative actions, the Steering Committee recommends a cross-jurisdictional steering committee provide governance/oversight role for GSS implementation, in relation to:
 - a. endorsing the proposed GSS Implementation Plan 2.0 prior to seeking SCO and Energy Council approvals
 - b. monitoring and ensuring timely completion of outstanding collaborative actions
 - c. improving efficiency in developing, and quality of, the regular GSS implementation progress reports provided to SCO and Energy Council.
- (3) To improve external stakeholder awareness of GSS Implementation, the Steering Committee recommends:
 - a. the release of the Review Report and a GSS Implementation Plan 2.0 Statement on the Council's website and directly to the stakeholders invited to participate in the review's consultation process
 - b. Resources Working Groups develop stakeholder engagement plans, in consultation with the cross-jurisdictional steering committee, to proactively inform and/or involve external stakeholders in the implementation of individual collaborative actions.
- (4) The Steering Committee recommends a further review of GSS implementation takes place in 2020.
- (5) The Steering Committee recommends future implementation efforts be focused on:
 - a. **Pre-competitive geoscience** – Improve information exchange and sharing knowledge on onshore and offshore gas reserves and production potential, and potential underground gas storage sites.
 - b. **Fostering public trust and confidence** – Improve cooperation between jurisdictions in responding to community concerns about potential local impacts of gas development.
 - c. **Leading practice regulation** – Leading practice regulatory frameworks in place to guide regulators in managing risks, reducing red tape and addressing technical and public trust/confidence issues related to the development of onshore gas, offshore gas and underground gas storage.

- (6) The Steering Committee recommends the five already completed collaborative actions be removed from the GSS Implementation Plan.
- (7) The Steering Committee recommends the remaining collaborative actions be streamlined through merging/amendment, consistent with stakeholder feedback collected through the review process.

The following list of collaborative actions are proposed for referral back to the cross-jurisdictional steering committee for appropriate division between Resources Working Groups and to refine implementation approaches prior to seeking Energy Council endorsement of a GSS Implementation Plan 2.0 by the end of 2018:

- a. Further encourage/enable the national expansion of the Gas Industry Social and Environmental Research Alliance (GISERA) to help build base level of trusted, neutral information within jurisdictions.
 - b. Develop and promote broad principles that apply to all types of onshore gas resource developments.
 - c. Develop broad principles for collaborative cross-jurisdictional programs to inform future offshore acreage releases and facilitate gas exploration and development in priority areas in Commonwealth offshore and State and Territory offshore waters
 - d. Evaluate efforts to foster community trust, confidence and engagement in Queensland and share findings amongst Resources Working Groups.
 - e. Communicate information for landholders and communities about the onshore gas industry, including information to assist landholders in negotiating access to land for gas developments.
 - f. Improve data and information sharing between jurisdictions to reduce the number of times/costs industry is approached to provide existing information.
 - g. Improve basin-level understanding of hydrocarbon (gas) resource potential in onshore and offshore basins that cross jurisdictional boundaries to:
 - i. improve knowledge of basin-level geology, gas resource potential, baseline environmental conditions and potential environmental impacts
 - ii. inform consideration of consistent regulatory conditions on both sides of the border for future gas projects.
 - h. Identify geological formations that have the potential to be developed for gas storage to improve security of gas supply.
- (8) The Steering Committee recommends SCO and Energy Council continue to identify and monitor opportunities for more ambitious cross-jurisdictional collaborative actions, in the context of role GSS implementation within broader environment, to encourage future gas supply.

ATTACHMENTS

1. Review Terms of Reference

The COAG Energy Council has tasked officials to commence a review of the COAG Energy Council's *Gas Supply Strategy Implementation Plan for Collaborative Actions* (GSS Implementation Plan). The Review will be undertaken by a Steering Group, comprising of representatives from the Upstream Petroleum Resources Working Group (UPR), Resources Policy and Engagement Working Group (RPEWG) and the Geoscience Working Group (GWG) and will be supported by the UPR Secretariat, with advice from the Australian Government Department of Industry, Innovation and Science's Evaluation Unit.

The Steering Group will draw on the expertise of the three COAG Energy Working Groups as required.

Background

To ensure the nation's energy needs are met, the COAG Energy Council (Energy Council) seeks to maximise the benefit to the Australian community from the responsible development of gas resources.

In keeping with the Energy Council's *Australian Gas Market Vision 2014*, Energy Council agreed that its resources should be better utilised to meet community expectations. The *Gas Supply Strategy* (GSS), released in December 2015, is the Energy Council's commitment to improve collaborative efforts between jurisdictions to achieve this, whilst taking account of each state and territory's circumstances.

On 19 August 2016, the Energy Council released the *GSS Implementation Plan for Collaborative Actions*. The GSS Implementation Plan complements the Energy Council's Gas Market Reform Package that was developed to address the recommendations of the *2016 ACCC's Inquiry into the East Coast Gas Market* and the *AEMC's Eastern Australian Wholesale Gas Market and Pipelines Framework Review: Stage 2 final report*. Gas supply is one of four priority areas identified in the Gas Market Reform Package – the other three priorities are market operation, gas transportation and market transparency. The GSS Implementation Plan provides detail on how jurisdictions will work together to achieve the recommendations of these reports and the objectives of the GSS.

On 25 August 2017, Energy Council agreed to amend the GSS and GSS Implementation Plan to include:

- investigations of onshore conventional gas resources as well as the development of offshore gas and underground gas storage;
- the western and northern gas markets; and
- the provision of better information for landholders and communities.

Individual jurisdictions are responsible for determining their level of participation in the implementation of the GSS. However, Energy Council members remain committed to sharing information and experiences, regardless of individual government policy positions, and can agree to include new collaborative actions at any time.

Authority for Review

On 25 August 2017, the COAG Energy Council agreed to officials commencing a review in January 2018 of the *GSS Implementation Plan for Collaborative Actions*. The Review will assess the effectiveness and appropriateness of the GSS and its implementation and will make broader recommendations regarding the Implementation Plan and the Gas Supply Strategy.

This is the first review of GSS implementation.

Review Scope and Timing

The primary purpose of the review is to evaluate the effectiveness and efficiency of the GSS Implementation Plan over its initial 18 month implementation period against the individual collaborative action KPIs and overarching intended outcomes of the GSS. The review will address strategic policy alignment, integration with other actions of individual jurisdictions, and the appropriateness of the GSS design. It will also consider the need for an additional implementation period to continue collaborative action under the GSS banner through:

- Ceasing or merging collaborative actions; and/or
- Recommending additional collaborative actions for Energy Council Ministers' consideration.

Effective review date – The review will examine the implementation of all 17 collaborative actions during the period 19 August 2016 to 31 December 2017.

The Review is scheduled to be completed in May 2018. The Review's findings and conclusions will be considered by SCO prior to providing the final report to the Energy Council for consideration at its mid-2018 meeting, and any subsequent release of information on Energy Council website.

Terms of Reference

The review Terms of Reference are consistent with the Expenditure Review Principles published by the Australian Government's Department of Finance and individual jurisdictions' government review expectations. In assessing government activity, evidence must be used to demonstrate whether the activity has achieved government policy objectives and desired outcomes.

Appropriateness

- Are the objectives of the GSS Implementation Plan still appropriate or do they need further review?
- Is the GSS Implementation Plan addressing relevant common jurisdictional scientific, regulatory and information needs?
- Is the GSS Implementation Plan still an appropriate strategy/ delivery mechanism to address common jurisdictional scientific, regulatory and information needs?
- What are the likely consequences of not addressing the identified common needs? What would have happened differently if the strategy had not been put in place? What are the learnings?

Effectiveness

- Have the GSS Implementation Plan's collaborative actions met the key performance indicators and milestones?
- Did the program have any unintended consequences (positive or negative)?
- Are amendments to, or new, collaborative actions required?

Integration

- Are the objectives of the GSS Implementation Plan and other UPR, RPEWG and GWG activities consistent?
- Are the GSS Implementation Plan collaborative actions consistent with actions being taken in individual jurisdictions?

Performance Assessment

- Are the key performance indicators for each collaborative action aligned with the objectives of the GSS Implementation Plan?

Strategic Policy Alignment

- Is the GSS Implementation Plan consistent with the achievement of the COAG Energy Council's Gas Market Vision?

Governance

Steering Group

A Steering Group will be established and will provide oversight and direction for the review. The Steering Group will develop and seek SCO approval of the Terms of Reference.

The Steering Group will ensure that the Terms of Reference are addressed, sufficient resources are applied to complete the review, and appropriate methods are used to provide evidence for the conclusions drawn in the final report.

Steering Committee members will be responsible for keeping their respective jurisdictions' representatives of COAG Energy Council working groups informed of the review process and consider their views as appropriate.

The final report will be finalised by consensus of the Steering Committee. Where matters cannot be resolved by the Steering Committee these will be referred to SCO for decision.

The Steering Group will comprise:

State and Territory Representatives

- **Jeffrey Haworth**, Executive Director Geoscience and Resource Strategy, Geoscience and Resource Strategy Division, WA Department of Mines, Industry Regulation and Safety (UPR representative)
- **Matthew Andrew**, Executive Director Strategic Policy, QLD Department of Natural Resources, Mines and Energy
- **John Krbaleski** (following Anthony Hurst's change in role), Executive Director, Earth Resources Policy & Programs, VIC Department of Economic Development, Jobs, Transport and Resources (UPR representative)

- **Victoria Jackson**, Executive Director Energy Division, NT Department of Primary Industry and Resources (UPR representative)
- **Barry Goldstein**, Executive Director Energy Resources, SA Department of Premier and Cabinet (UPR Chair)
- **Chris Yeats**, Executive Director, Geological Survey of NSW, Division of Resources and Geoscience, NSW Department of Planning and Environment (GWG Chair)
- **Ben Waining**, Principle Policy Officer, TAS Department of State Growth (UPR representative)

Commonwealth Government

- **David Turvey**, General Manager, Insights and Evaluation Branch, Economic and Analytical Services Division, Department of Industry, Innovation and Science (Steering Committee Chair)
- **Michael Sheldrick**, General Manager, Onshore Energy Branch, Resources Division, Department of Industry, Innovation and Science

The Review will be supported by the UPR Secretariat and will be progressed out-of-session.

Secretariat

Secretariat and administrative support to the Steering Group and the Review more generally will be provided by the Resources Division of the Department of Industry, Innovation and Science.

The Department of Industry, Innovation and Science, specifically the UPR Secretariat within the Onshore Gas team, has responsibility for leading the report drafting process with input from a drafting group (comprised of supporting officials within jurisdictions as nominated by Steering Group members) and advice from the DIIS Evaluation Unit.

The Steering Group will meet for milestone events and other times as required, as indicated below:

Task	Date
Discuss and agree on the Terms of Reference and UPR/RPEWG/GWG workshop agenda. Discuss and provide advice on the consultation process	Second week of February 2018
Discuss and agree the external stakeholder workshop agenda and arrangements.	Early March 2018
Discuss draft findings and recommendations	Late March/early April 2018
Discuss and provide comment on Draft Report	Late April 2018
Approval of Final Report	Out of session - late May 2018

Methodology of Review

In order to conduct the review a number of approaches will be used, including:

- Desktop literature review covering official documentation of GSS and GSS Implementation Plan, Resources Working Group meeting minutes, four GSS implementation progress reports;
- Collection and analysis of data from Commonwealth agencies and state and territory governments;
- A workshop of UPR, RPEWG and GWG officials will consider ceasing, amending or merging existing or developing new collaborative actions for GSS Implementation Plan 2.0, and determine stakeholders to be invited to the external stakeholder workshop; and
- A facilitated workshop to obtain external stakeholder input and feedback on the effectiveness of GSS implementation and draft report recommendations.

2. Individual collaborative action assessments

Action	Description	Initial assessment of milestones/KPIs	27 Feb workshop suggestions
1	Ensure that pre-competitive science and geological programs, including petroleum and water, continue to be developed in consultation with industry and other relevant stakeholders		MERGE with #2, #3 & #4 and AMEND: <ul style="list-style-type: none"> so water component of CA's #1 to #4 focuses on understanding baseline perspective, on basin-level, and regulators communicating the outcomes/knowledge of that baseline information. refocus actions around data that is accessible to UPR reflect there is a distinction between water and hydrocarbons, and a determination of which is of interest and when remove reference to Resources Data Initiative as it has stalled GWG to be responsible for drafting text for merged action, in consultation with UPR, and its subsequent implementation if approved.
Working group	COAG Energy Council Geoscience Working Group (GWG)		
TIMEFRAME	Ongoing		
APPROACH	Ensure that GWG and UPR provide input to the collaborative action by including as a discussion item at its 2017 meetings. Liaison with APPEA's Exploration Sub-committee (or another appropriate working group within APPEA).		
MILESTONES	February 2017 – presentation to APPEA sub-committee on forward program April 2017 – paper written for GWG meeting on pre-competitive program	FEB 2017 milestone COMPLETED - reported in GSS progress report #2 APR 2017 Milestone – no evidence of progress/completion	
KPIs	GWG endorse program at annual meeting in 2017 February 2017, APPEA sub-committee supports forward work plan	No evidence available to assess KPIs	

Action	Description	Initial assessment of milestones/KPIs	27 Feb workshop suggestions
2	Agree on detailed geoscience data standards to support inter-operability of data management systems, reduced submissions costs, and enhance data search and integration capability for exploration study analysis and interpretation.		See comments in #1
LEAD WORKING GROUP	COAG Energy Council Upstream Petroleum Resources Working Group (UPR) / Australian Government – Geoscience Australia		
TIMEFRAME	Late 2017		
APPROACH	Consult with/involve Geoscience Working Group (GWG), Government Geoscience Information Committee (GGIC) and Land Access for Resources Working Group (LARWG) on this work as appropriate and report through UPR. This work is also inter-related with UPR's Resources Data Initiative.		
MILESTONES	December 2016 – Identify datasets submitted to government June 2017 – Identify datasets requiring standards Late 2017 – Deliver report to UPR	No evidence of progress/completion of milestones, however other activity consistent with this collaborative action has been reported in GSS progress reports.	
KPIs	Deliver report to UPR, GWG and GGIC in late 2017 detailing data standard requirements	No outputs available to assess KPIs	

Action	Description	Initial assessment of milestones/KPIs	27 Feb workshop suggestions
3	Define programs that will enhance the characterisation of interactions between hydrocarbon and water resources, and the ready access to this information to increase inform project plans and stakeholders' knowledge.		See comments in #1
LEAD WORKING GROUP	COAG Energy Council Upstream Petroleum Resources Working Group (UPR) / South Australia – Department of the Premier and Cabinet AND COAG Energy Council Geoscience Working Group (GWG)		
TIMEFRAME	Ongoing		

APPROACH	UPR, LARWG and GWG taskforce to investigate the development of collaborative programs to address the Collaborative Action. This will involve engagement with co-regulators on water resources, including jurisdictional Environmental Protection Authorities and Departments for Water.		
MILESTONES	Early 2017 – Joint taskforce to deliver a report to SCO on potential programs that could be pursued.	No evidence of progress/completion of milestones, however other activity consistent with this collaborative action has been reported in GSS progress reports.	
KPIs	Early 2017 – Joint taskforce to deliver a report to SCO on potential programs that could be pursued.	No evidence available to assess KPIs	

Action	Description	Initial assessment of milestones/KPIs	27 Feb workshop suggestions
4	Look at options to develop a database to provide a mechanism for jurisdictions to share a nationally agreed set of statistical data on industry activity, including the addition of environmental data to improve public availability of baseline environmental and monitoring results.		See comments in #1
LEAD WORKING GROUP	COAG Energy Council Upstream Petroleum Resources Working Group / Australian Government – Geoscience Australia		
TIMEFRAME	Immediately – June 2017		
APPROACH	Canvass state/NT petroleum regulators to determine a small set of statistics that readily define industry activity. This work is also inter-related with UPR’s Resources Data Initiative (RDI). Discuss with the Project Manager for the Resources Data Initiative to determine the progress of defining environmental datasets		
MILESTONES	December 2016 – report on discussions with state/NT petroleum regulators December 2016 – report on discussion with RDI PM June 2017 – Define uniform set of statistical data to be provided by states/NT	No evidence of progress/completion of milestones, however other activity consistent with this collaborative action has been reported in GSS progress reports.	
KPIs	By 30 June 2017, deliver report to SCO via UPR on an agreed statistical dataset to be provided by states/NT to the Australian Government.	No evidence available to assess KPIs	

Action	Description	Initial assessment of milestones/KPIs	27 Feb workshop suggestions
5	Agree on a statistical dataset that can be shared and compiled for UPR’s <i>Coal Seam, Shale and Tight Gas in Australia: Resources Assessment and Operation Overview</i> including expansion to cover all onshore gas resources, reserves, drilling activity, well performance, and production data.		REMOVE, noting finalisation of 2017 report (first one expanded to cover all onshore and offshore) is imminent and SCO approval to publish to be sought out-of-session in Q2 2018. UPR to continue preparing annual reports as BAU work plan item.
LEAD WORKING GROUP	COAG Energy Council Upstream Petroleum Resources Working Group (UPR) / Australian Government – Geoscience Australia		
TIMEFRAME	September 2016 – September 2017		
APPROACH	Individual discussions with states/NT petroleum regulators on what is possible to provide and UPR consider a paper and input at its September 2016 meeting, prior to the report being developed and reported to COAG in September 2017.		
MILESTONES	August/September 2016 - Circulate task request for initial input, comments and additional input for discussion at the September 2016 meeting. September 2016 – Seek UPR agreement to dataset list. February 2017 – Provide UPR agreed dataset list to report developers to assist finalising the Coal Seam, Shale and Tight Gas in Australia: Resources Assessment and Operation Overview. August 2017 – Finalise the report. September 2017 – Provide final report to COAG Energy Council.	August/September 2016 milestone COMPLETED, albeit late (out-of-session mid-2017 September 2016 milestone COMPLETED, albeit late – UPR October 2017 meeting minutes February 2017 milestone PARTIALLY COMPLETED – input received from some jurisdictions noted in UPR October 2017 meeting minutes; March 2018 meeting draft minutes note still incomplete. August and September 2017 milestones - no evidence of progress/completion of milestones	
KPIs	Consideration and input provided by each jurisdiction. Reaching a consensus on which statistical datasets are to be used.	All jurisdictions have been given a draft report to consider and opportunity to provide input and feedback. UPR agreed to dataset list in October 2017. Final report not ready for submission to COAG Energy Council.	

	By September 2017, deliver a report to UPR on statistical data requirements for the annual gas report to the COAG Energy Council. Submission to COAG Energy Council in September 2017.		
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Action	Description	Initial assessment of milestones/KPIs	27 Feb workshop suggestions
6	Expand the Gas Industry Social and Environmental Research Alliance (GISERA) model into New South Wales and ensure arrangements/framework allows for other jurisdictions to join the alliance in the future.		Broad support for the GISERA model, however some jurisdictions do not have funding to financial support expansion into their jurisdiction. AMEND to reflect that GISERA expansion across Australia is the intended outcome.
LEAD WORKING GROUP	Australian Government – CSIRO		Not discussed – but perhaps need to consider whether UPR/RPEWG most appropriate to be responsible for amending and leading action.
TIMEFRAME	July 2016 – December 2018		Post workshop note: End date can be amended to mid-2019, in accordance with Cwth/CSIRO grant agreement.
APPROACH	CSIRO to work collaboratively with the following agencies to develop a National GISERA expansion into New South Wales: <ul style="list-style-type: none"> <u>Australian Government Department of Industry, Innovation and Science</u> <u>NSW Department of Planning and Environment (Energy, Water and Portfolio Strategy Division)</u> Following successful implementation CSIRO will work collaborative with the following state and territory governments to pursue options for further expansion of GISERA into Northern Territory and South Australia: <ul style="list-style-type: none"> <u>SA Department of the Premier and Cabinet</u> <u>NT Department of Mines and Energy</u> 		TBC – refocus on jurisdictions supporting the national expansion of GISERA
MILESTONES	<p>11 August 2015 – Australian Government and NSW Government announced joint \$3 million funding towards the expansion of GISERA into NSW.</p> <p>4 January 2016 – National GISERA Alliance Agreement came into effect, expires 31 December 2018 and allows for other jurisdictions to enter the arrangement.</p>	<p>All milestones COMPLETED – see Australian Government announcement http://minister.industry.gov.au/ministers/macfarlane/media-releases/new-investment-expand-gas-industry-research DIIS advice re: date of execution of grant agreement.</p>	TBC
KPIs	<p>January 2016: GISERA Agreement signed-off by all parties.</p> <p>March 2016: Establishment of NSW Regional Research Advisory Committee.</p> <p>June 2016: First GISERA research proposals agreed to and signed-off by the NSW Regional Research Advisory Committee.</p> <p>December 2016: First reporting by GISERA research projects operating in NSW.</p> <p>June 2017: Second tranche of GISERA research proposals agreed to and signed-off by the NSW Regional Research Advisory Committee.</p> <p>December 2017: Second round reporting by GISERA research projects operating in NSW.</p> <p>June 2018: Community Stakeholder Knowledge Transfer meetings underway in Narrabri region.</p> <p>December 2018: Final reports by all GISERA research projects operating in NSW</p>	<p>The Alliance Agreement was fully executed on 4 January 2016. A Variation to change the Alliance Term end date from 30 June 2018 to 31 December 2018 was fully executed on 24 May 2016. See further details at: https://gisera.csiro.au/research-independence/national-gisera-agreement/</p> <p>NSW Regional Research Advisory Committee established – details, including meeting minutes, are available at https://gisera.csiro.au/research-independence/new-south-wales-regional-advisory-committee/</p> <p>Details of NSW GISERA research is available at https://gisera.csiro.au/states/nsw/</p> <p>GSS Progress Reports 1, 2 and 3 notes specific dates of completion of KPIs to date.</p> <p>Assessment of June 2018 and December 2018 KPIs cannot occur yet as they are subject to future action.</p>	TBC

Action	Description	Initial assessment of milestones/KPIs	27 Feb workshop suggestions
7	Coordinate the development of a common set of FAQ's for use by all jurisdictions, including hosting a forum of representatives from relevant agencies such as Geoscience Australia and state and territory based regulators to consider and publish agreed facts and answers to FAQs.		REMOVE, noting UPR will still do six monthly reviews to ensure content is 'evergreen' and need for new questions. RPEWG might like to consider better ways to communicate the information arising from this action as part of implementing #17.
LEAD WORKING GROUP	COAG Energy Council Upstream Petroleum Resources Working Group (UPR)/ Australian Government – Department of Industry, Innovation and Science		
TIMEFRAME	July 2016 to December 2016, then six-monthly reviews and updates as required.		Update to ongoing with 6 monthly review
APPROACH	Host a forum then develop FAQ document in collaboration with Upstream Petroleum Resources Working Group, Land Access for Resources Group and the Gas Major Projects Implementation Taskforce. FAQs document to be reviewed and updated (if required) FAQs on a six-monthly basis.		Forum was cancelled and funding allocated to action #8, now plan to retrieve funding for a rewrite of FAQs.
MILESTONES	Q4 2016 – Forum convened Q1 2017 – FAQs document finalised Six monthly reviews as required	UPR decision (UPR March 2017 meeting minutes) to not proceed with forum noted in GSS progress report 2. SCO agreed to transfer \$20,000 from UPR to (then LARWG) to assist with GSS action #8 workshop (Energy Special Account Managers advised only \$15,177 was transferred) FAQs document finalised for SCO consideration to publish in January 2018, noted completed albeit publication pending in GSS progress report 3. Note: Feedback received from SCO members required further edits prior to publication, which have been addressed and approved by UPR in March 2018 (UPR March 2018 draft meeting minutes). SCO approval received prior to FAQs being published on Energy Council website on 27 June 2018.	Forum cancelled – revise FAQ document finalised Q4 2017
KPIs	Forum attendance levels Adoption and use of common FAQs by stakeholders Faster response rates to stakeholder inquiries Greater public understanding of answers to commonly asked questions	Forum not held, therefore cannot assess forum attendance levels. Future assessment of remaining KPIs subject to public release of FAQs.	Revise

Action	Description	Initial assessment of milestones/KPIs	27 Feb workshop suggestions
8	Continue efforts to encourage better community engagement, particularly in respect to land access case studies and community acceptance research through sharing communications tools and resources that have proven to be successful. This will include: hosting an information forum and development of a better practice case studies document, which will include outcomes, CSIRO community engagement and acceptance research, review of jurisdictional approaches to native title issues and pursue better visibility of LARWG on COAG EC website.		REMOVE – noting action #17 supersedes and will result in better outcomes
LEAD WORKING GROUP	COAG Energy Council Land Access for Resources Working Group (LARWG)		
TIMEFRAME	Work underway; to be completed by December 2016		
APPROACH	Host an information sharing forum for COAG Energy Council officials to share learnings and develop information products about land access, communication protocols and frameworks for dispute resolution. Continue to progress LARWG current program of work, focussed on understanding the drivers of community acceptance and improving community engagement.		
MILESTONES	July 2016 – CSIRO Community Acceptance research, including further analysis of key findings (where relevant) completed August 2016 – Community Engagement Case Studies fully researched and compiled December 2016 – Completion of “Better Practice Community Engagement Handbook”, drawing on issues/messages identified in CSIRO Community Acceptance research and the completed Community Engagement case studies	CSIRO has presented key findings of CSIRO Project 3 Report “Stakeholder engagement processes: exploring the mechanisms for constructive social engagement around mine site development” to (then) LARWG. (LARWG August 2017 meeting draft minutes). Better Practice Community Engagement case studies completed (RPEWG Oct 2017 meeting draft minutes) Forum not held, therefore \$15,177 funding returned to UPR for other work plan priorities in early 2018.	

	2016-17 FY - Forum held to share learnings and develop information documents in collaboration with relevant members from the LARWG, Upstream Petroleum Resources Working Group (UPR) and the Gas Major Projects Implementation Team (GMPIT).		
KPIs	Forum held with good representation/engagement from LARWG, UPR and GMPIT members Community acceptance research findings and “ <i>Better Practice Community Engagement Handbook</i> ” delivered to the COAG Energy Council	Forum not held, therefore cannot assess forum attendance/engagement of working group members. Publication of Better Practice Community Engagement Handbook pending.	

Action	Description	Initial assessment of milestones/KPIs	27 Feb workshop suggestions
9	Host a forum of Government officials to discuss pursuing Australian standard(s) on relevant onshore gas issues that will underpin productivity.		Tasmania observing Complete – REMOVE, noting follow up from the workshop to be reflected in amended #14
LEAD WORKING GROUP	COAG Energy Council Upstream Petroleum for Resources Working Group (UPR) / South Australia – Department of the Premier and Cabinet		
TIMEFRAME	By late 2017		
APPROACH	Joint UPR, LARWG and GMPIT project team to organise a forum, to be held in conjunction with a UPR meeting, which takes into consideration/link to other regulations and standards work as appropriate, including work being undertaken by the National Energy Resources Australia (NERA). NERA to be invited to participate in the forum. This forum could help jurisdictions learn more about domestic and international expertise on regulatory developments, social, natural and economic matters. It is proposed that the Forum outcomes would, at a minimum, be shared with the COAG Energy Council.		
MILESTONES	Mid-2017: Forum held Late 2017: Forum outcomes shared with COAG Energy Council	Forum held 13 October 2017 in Darwin. Overview of forum outcomes included in GSS progress report 3 and details provided to UPR officials.	
KPIs	Forum outcomes to be shared with the COAG Energy Council in the first instance, then disseminated to officials.	Overview of forum outcomes included in GSS progress report 3 and details provided to UPR officials.	

Action	Description	Initial assessment of milestones/KPIs	27 Feb workshop suggestions
10	Develop and share work-flow diagrams to document the robustness and equivalence of upstream petroleum licensing and activity approval processes across Australian jurisdictions.		REMOVE and circulate additional/updated work-flow diagrams in the future.
LEAD WORKING GROUP	COAG Energy Council Upstream Petroleum Resources Working Group (UPR) / South Australia – Department of the Premier and Cabinet		
TIMEFRAME	By June 2018		
APPROACH	Step 1: All jurisdictions map their co-regulatory work-flows that lead to: <ul style="list-style-type: none"> •Informed assessment / approval, or •Informed assessment / a request for more information to enable further consideration before approval, or •Informed assessment / making a determination that a project as described will not be approved. Step 2: Compare jurisdictions’ co-regulatory work-flow diagrams to demonstrate where jurisdictions differ / are alike. This would likely be best undertaken by an independent party. Funding will likely to be sought in the COAG Energy Council 2017-18 Budget process to undertake Steps 2 and 3. Step 3: Broadly characterise leading practice for co-regulatory assessment and approvals.		UPR previously decided not to proceed with engaging a consultant for Steps 2 and 3.
MILESTONES	Step 1: completed by April 2017 . Step 2: completed by end 2017 . Step 3: completed by early 2018 .	Step 1 reported COMPLETED in GSS progress repot 3.	

	Publication on COAG Energy Council website by June 2018 .	<p>UPR did not agree to seeking additional funds to engage a consultant to undertake Steps 2 and 3 for Collaborative Action #10. Instead, UPR agreed for UPR Secretariat to circulate jurisdictions' workflow diagrams to members for individual review/comparison. (UPR Oct 2017 meeting minutes)</p> <p>In regards to Step 3, UPR noted that it may be able to draw on learnings from National Harmonised Regulatory Framework for Natural Gas from Coal Seams review (GSS collaborative action #11) in respect to the characterisation of leading practice for co-regulatory assessment and approvals, therefore UPR should await the outcome of that process to inform further discussions. (UPR Oct 2017 meeting minutes)</p>	
KPIs	<p>Each jurisdiction develop work-flow diagrams on their co-regulatory upstream petroleum licensing and activity approval processes.</p> <p>Produce a report on jurisdictions' co-regulatory work-flow diagrams to demonstrate where jurisdictions differ / are alike.</p> <p>Identify leading practice for co-regulatory assessment and approvals.</p> <p>Produce a paper analysing leading practice for co-regulatory assessments and approvals, which will be disseminated to jurisdictions for discussion.</p> <p>Publish diagrams illustrating key upstream petroleum licensing and activity approval processes across Australian jurisdictions on the COAG Energy Council website.</p>	<p>Work flow diagrams circulated to UPR members.</p> <p>Remaining KPIs unlikely to be achieved given UPR decisions in October 2017.</p>	

Action	Description	Initial assessment of milestones/KPIs	27 Feb workshop suggestions
11	Review of the National Harmonised Regulatory Framework for Natural Gas from Coal Seams (NHRF)		Victoria & Tasmania observing
LEAD WORKING GROUP	COAG Energy Council Upstream Petroleum Resources Working Group (UPR) / Australian Government – Department of Industry, Innovation and Science		Merge with #13 as per Cwth proposal to evolve NHRF into Leading Practices for Onshore Gas development, details to be discussed at March 2018 meeting
TIMEFRAME	Immediately to December 2017		Change to reflect UPR meeting outcomes
APPROACH	<p>Through a time limited sub- group drawing on relevant expertise from the GMPIT, UPR and LARWG, the Commonwealth will lead the update of the National Harmonised Regulatory Framework for Natural Gas from Coal Seams (the Framework). This to fulfil the COAG Energy Council's commitment to improving collaborative efforts between jurisdictions on scientific and regulatory issues associated with onshore gas. The commitment to update the Framework on a continuing basis was also made at the time of its endorsement at the 31 May 2013 Energy Council meeting.</p> <p>To update the Framework officials will:</p> <ul style="list-style-type: none"> Engage a legal firm to identify new and amended legislation and regulation applicable to coal seam gas (CSG) extraction enacted since the Framework was developed in late 2012. Engage a consultant to review and update the leading practice regulation aspects of the Framework with Australian regulatory requirements (regulation and standards) for CSG exploration and production in each jurisdiction introduced since the Framework was finalised in 2013. 		Change to reflect UPR meeting outcomes
MILESTONES	<ul style="list-style-type: none"> Establish a time limited sub-group comprising Commonwealth, state and territory jurisdictions. Engage a consultant to review leading practice standards and regulations and legal firm review legislation since the framework was developed in 2012. Establish a Stakeholder Reference Group including industry representatives to provide input to the drafting process. Develop draft update of the Framework. Undertake public consultation 	<p>In addition to UPR members, some other contacts in Cwth Department of the Environment and Energy and South Australia were asked to review consultant reports throughout process. (DIIS advice)</p> <p>King & Wood Mallesons and Advisian were engaged to undertake legal and leading practices components of reviews, including stakeholder consultation as appropriate. Final reports delivered by end 2017. (DIIS advice and GSS progress report 3)</p>	Change to reflect UPR meeting outcomes

	<ul style="list-style-type: none"> Complete the final Framework update for COAG Energy Council agreement in December 2017. 	Note: UPR initial consideration of Cwth/NT/WA proposal to evolve NHRF into Onshore Gas Leading Practices in March 2018 (UPR Mar 2018 meeting draft minutes)	
KPIs	COAG Energy Council Minister's agree to the reviewed Framework in 2017.	Assessment of KPI subject to future action.	Change to reflect UPR meeting outcomes

Action	Description	Initial assessment of milestones/KPIs	27 Feb workshop suggestions
12	Review of relevant Inquiry reports (e.g. into hydraulic fracturing) to identify common recommendations that could be address in the NHRF update and/or point to further work that could be done at a national level.		Victoria & Tasmania observing REMOVE action, but still update doc once NT & WA inquiry reports released. Updated document to be circulated to WG's for information and input to other collaborative actions.
LEAD WORKING GROUP	COAG Energy Council Upstream Petroleum Resources Working Group (UPR) / Australian Government – Department of Industry, Innovation and Science		
TIMEFRAME	October 2016 to March 2017		
APPROACH	<p>Paper to be developed by the Commonwealth in consultation with state and territory governments via a time limited sub-group during the latter stages of development.</p> <p>Paper to provide a useful summation of Inquiry reports, identify further work required to seek national alignment of objectives for the regulation of shale and tight gas developments and, if appropriate, provide recommendations for further work. This work is linked to collaborative action #10.</p>		
MILESTONES	<p>December 2016: Initial draft completed for consultation.</p> <p>February 2017: States and territory government officials provide feedback and comments.</p> <p>March 2017: Final paper with recommendations circulated.</p>	All milestones COMPLETED, albeit no recommendations were suggested.	
KPIs	Paper finalised and circulated to COAG EC officials by the end of March 2017.	Document circulated to UPR members and NHRF consultants in October 2017.	

Action	Description	Initial assessment of milestones/KPIs	27 Feb workshop suggestions
13	Lead development of a paper to seek national alignment of objectives for the regulation of shale and tight gas developments.		Victoria & Tasmania observing Merge with #11 as per Cwth proposal to evolve NHFR into Leading Practices for Onshore Gas development, details to be discussed at March 2018 meeting
LEAD WORKING GROUP	COAG Energy Council Upstream Petroleum Resources Working Group (UPR) / Western Australia – Department of Mines Industry Regulation and Safety		Change to reflect UPR meeting outcomes
TIMEFRAME	1 July 2016 - 1 June 2017		Change to reflect UPR meeting outcomes
APPROACH	To develop a "Principles" paper on objectives of harmonisation of regulation of the petroleum industry in Australia (including shale and tight gas) by 30 June 2016. Upon agreement within UPR on these principles, to then develop a position paper including metrics on how the jurisdictions will roll out and report on incorporating these principles into their various legislation regulations and/or codes of practice to present to COAG Energy Council by 30 December 2016. Reporting to be done twice yearly with first report June 2017.		Change to reflect UPR meeting outcomes
MILESTONES	<p>30 July 2016: Draft Principles paper developed and presented to UPR</p> <p>September 2016: Final Principles paper agreed to by UPR</p> <p>December 2016: Position paper completed for submission to COAG Energy Council</p> <p>March 2017: Metrics and format of report for use by States, NT prepared for UPR</p> <p>30 June 2017: First report submitted by jurisdictions on the incorporation of principles into legislation, regulation and/or codes of practice.</p>	<p>30 July 2016, September 2016 and December 2016 milestones COMPLETED. COAG Energy Council agreed to the principles for national alignment of objectives for the regulation of petroleum in December 2016 (COAG Energy Council Dec 2016 meeting minutes)</p> <p>Development of metrics commenced, but stalled due to jurisdictional differences.</p>	<p>Note: inability to agree to metrics has been stumbling block and last KPI unlikely to even happen.</p> <p>Change to reflect UPR meeting outcomes</p>
KPIs	See milestones above for the project itself, metrics for how implemented to be developed.	See above	Change to reflect UPR meeting outcomes

Action	Description	Initial assessment of milestones/KPIs	27 Feb workshop suggestions
14	Support and promote the National Energy Resources Australia (NERA) and METS Ignited Growth Centres		KEEP, but AMEND to remove supply chain elements and using SA proposal as basis, build objective around pursuing application of international standards in Australia.
LEAD WORKING GROUP	COAG Energy Council Upstream Petroleum Resources Working Group (UPR) / SA Department of Premier and Cabinet		Change to UPR
TIMEFRAME	1 July 2016 – September 2019		Change to reflect SA proposal and UPR outcomes at March 2018 meeting.
APPROACH	Australian Department of Industry, Innovation and Science – Provide \$65.12m (GST inclusive) over four years for the two growth centres. The Growth Centres’ activities and projects will be available to the unconventional gas industry and supply chain, along with other sectors. <ul style="list-style-type: none"> QLD Department of State Development – Provide \$6m (incl GST) over four years plus staffing support for METS Ignited. WA Department of Commerce – Provide \$875,000 over four years for NERA. SA Department of the Premier and Cabinet – Through the Mining Industry Participation Office (MIPO), the Roundtable for Oil and Gas Projects in South Australian and the Oil and Gas Supplier Forum (working group #6 under the Roundtable), support and collaborate with NERA and METS Ignited to improve the extension of local supply chains into local and international oil and gas markets, including supplying to Australian oil and gas operators. 		Change to reflect SA proposal and UPR outcomes at March 2018 meeting.
MILESTONES	<p>Growth Centres established and funded from 2015-16.</p> <p>Ten year sector competitiveness strategic plans developed by National Energy Resources Australia and METS Ignited, to guide priority industry-led actions for responsible growth including for unconventional gas by December 2016.</p>	METS Ignited launched the first METS Sector Competitiveness Plan at the International Mining and Resources Conference (IMARC) on 8 November 2016. NERA 10-year Sector Competitiveness Plan released on 22 February 2017 at the Australasian Oil and Gas exhibition and conference (AOG 2017), Perth. (GSS progress report 2)	Change to reflect SA proposal and UPR outcomes at March 2018 meeting.
KPIs	Successful delivery of projects and initiatives.	GSS progress reports identify a number of projects have been initiated. Assessment of KPI subject to ongoing and future action.	Change to reflect SA proposal and UPR outcome at March 2018 meeting.

Action	Description	Initial assessment of milestones/KPIs	27 Feb workshop suggestions
15	Develop broad principles for collaborative cross-jurisdictional programs to inform future offshore acreage releases and facilitate gas exploration and development in priority areas in Commonwealth offshore and State and Territory offshore waters		KEEP. Too early to assess effectiveness, milestones and KPIs.
LEAD WORKING GROUP	COAG Energy Council Upstream Petroleum Resources Working Group (UPR) / Geoscience Australia (GA)		No change to working group. Question for UPR – should jurisdictional lead contact change?
TIMEFRAME	Ongoing		No change
APPROACH	UPR to consult with GWG to investigate the development of collaborative pre-competitive geoscience programs to address the Collaborative Action. Liaison with APPEA’s Exploration Sub-committee (or another appropriate working group within APPEA).		No change, but subject to UPR consideration of Vic paper in March 2018.
MILESTONES	<p>August 2017 – Australian Government Department of Industry, Innovation and Science (DoIIS) to deliver a report on the Offshore South East Australia Future Gas Supply Study.</p> <p>December 2017 –UPR to deliver a paper to SCO on collaborative geoscience offshore programs and forward program</p> <p>June 2018 and year thereafter –UPR to deliver a paper to SCO on progress and outcomes of collaborative offshore geoscience programs</p> <p>December 2018 – UPR to deliver a paper to SCO on economic analysis, to assess the potential for a grants program for offshore development</p>	<p>August 2017 milestone COMPLETED in September 2017 (GSS progress report 3) - Offshore South East Australia Future Gas Supply Study</p> <p>December 2017 milestone NOT COMPLETED, however initial proposal was discussed at UPR Oct 2017 meeting and subject to further development of proposal in light of UPR comments (UPR Oct 2017 meeting minutes)</p> <p>Completion of remaining milestones outside current review time period (subject to future action)</p>	As per comments below plus Cwth and VIC agreeable to having further discussions about aligning/packaging acreage releases.
KPIs	<p>August 2017 – Australian Government Department of Industry, Innovation and Science (DoIIS) delivers a report on the Offshore South East Australia Future Gas Supply Study, including near-term (brownfields) and long-term (greenfields) prospectivity.</p> <p>March 2018 –UPR endorse forward program</p> <p>December 2017 – UPR to deliver a paper to SCO on collaborative offshore programs and forward program</p>	<p>August 2017 KPI ACHIEVED in September 2017 (GSS progress report 3)</p> <p>Completion of remaining KPIs outside current review time period (subject to future action)</p>	<p>Australian Government Department of Industry, Innovation and Science (DoIIS) delivered a report on the Offshore South East Australia Future Gas Supply Study, including near-term (brownfields) and long-term (greenfields) prospectivity in November 2017.</p> <p>Vic to deliver a paper to UPR in March – delayed given study was delayed. Change highlighted milestones/KPIs to reflect.</p>

	<p>June 2018 and year thereafter – UPR to deliver a paper to SCO on progress and outcomes of collaborative offshore programs</p> <p>Late 2018 – Data released from jurisdictions as it becomes available, to inform project plans and stakeholder knowledge</p> <p>December 2018 – UPR to deliver a paper to SCO on economic analysis, to assess the potential for a grants program for offshore development</p> <p>June 2019 – 3D geological model of offshore basins delivered by participating jurisdictions</p> <p>June 2019 and thereafter – Offshore acreage releases utilise 3D geological models of offshore basins</p>		
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Action	Description	Initial assessment of milestones/KPIs	27 Feb workshop suggestions
16	Identify geological formations that have the potential to be developed for gas storage to improve security of gas supply		KEEP. Too early to assess effectiveness, milestones and KPIs.
LEAD WORKING GROUP	COAG Energy Council Geoscience Working Group (GWG)		No change
TIMEFRAME	Ongoing		No change
APPROACH	GWG consult with UPR and investigate the development of collaborative pre-competitive programs to address the Collaborative Action.		Consider amending to engage engineers to advise on commerciality of potential reservoirs and optimal injection/withdrawal rates
MILESTONES	<p>December 2018 –GWG to deliver a paper to SCO on geoscientific information of known depleted reservoirs, to assess the suitability of structures for underground gas storage</p> <p>June 2019 – UPR to deliver a paper to SCO on economic analysis, to assess the commercial viability of developing structures for underground gas storage, and to determine storage demand and impact on prices/supply</p>	Completion of milestones outside current review time period (subject to future action)	No change
KPIs	<p>September 2017 – UPR and GWG endorse program</p> <p>December 2018 – GWG deliver a paper to SCO on geoscientific information of known depleted reservoirs, to assess the suitability of structures for underground gas storage</p> <p>June 2019 – UPR delivers a paper to SCO on economic analysis, to assess the commercial viability of developing structures for underground gas storage, and to determine storage demand and impact on prices/supply</p>	<p>No evidence available to show progress/completion of September 2017 KPI.</p> <p>Remaining KPIs cannot be assessed as they are subject to future action.</p>	Need to amend first milestone – GWG to consider and advise of required edit

Action	Description	Initial assessment of milestones/KPIs	27 Feb workshop suggestions
17	Communicate information for landholders and communities about the onshore gas industry, including information to assist landholders in negotiating access to land for gas developments		KEEP, potential to communicate outcomes of other actions through this future work. Too early to assess effectiveness, milestones and KPIs.
LEAD WORKING GROUP	COAG Energy Council Resources Policy and Engagement Working Group (LARWG) / Australian Government Department of Industry, Innovation and Science		No change, apart from updating WG name
TIMEFRAME	Ongoing until 2020/2021		No change
APPROACH	<p>Engage a consultant/s to collate information material on land access, community engagement and community benefits and an associated communication strategy, in consultation with the states and the Northern Territory, through UPR and RPEWG. The work will draw together key findings from current practices, including outcomes from GSS collaborative actions #7 and #8, research including but not limited to the Gas Industry Social and Environmental Research Alliance (GISERA) and Bioregional Assessments Program.</p> <p>Key information material will include a clear description of the responsibilities of Commonwealth, State and Territory governments, benefits of the industry for communities, and the land access arrangements applying across jurisdictions.</p>		<p>Suggest consider how the outputs of #7 (FAQs) and #12 (review of inquiry recommendations) could be communicated in the future.</p> <p>Suggest consider engaging consultant to evaluate what worked well in Queensland from a social licence/community engagement perspective & if Agforce/Gasfields Commission roll out to other jurisdictions should be recommended.</p>

	The information will be collated and presented in an easily accessible way that assists landholders in negotiating access to land for petroleum companies, and enables communities to better understand and engage in resource developments. The consultant/s will advise on how best to convey the information using a range of tools including social media.		
MILESTONES	December 2017 – commence information material development January 2018 – June 2021 – information publication	LARWG discussed this action in October 2017 and clarified a number of matters in regard to its scope including state and territory legislation and regulation. LARWG will proceed to develop proposals for engaging procurements for this activity. (GSS progress report 3, RPEWG Oct 2017 draft meeting minutes)	RPEWG currently considering next steps, more information to follow
KPIs	Ministers endorse information publication.	Assessment of KPI cannot occur yet as it is subject to future action.	

3. Evidence base and consultation processes

In accordance with the review Terms of Reference, a literature review and two government and external stakeholder workshops were conducted to inform the review.

Literature review

The following documents were identified and reviewed by the Steering Committee:

1. Gas Supply Strategy documents
 - a. Gas Supply Strategy (December 2015)
 - b. Gas Supply Strategy Implementation Plan for Collaborative Actions (August 2016)
 - c. Gas Supply Strategy (amended August 2017)
 - d. Gas Supply Strategy Implementation Plan for Collaborative Actions (amended August 2017)
 - e. 1st, 2nd and 3rd GSS implementation progress reports, published on Energy Council website
 - f. Not-published 4th GSS implementation progress report, covers period from 1 November to 31 December 2017 as drafted by working group officials in January 2018
 - g. GSS collaborative action #12 paper – *Comparison of recommendations from recent Inquiries into unconventional gas*
2. SCO agenda papers:
 - a. **29 July 2016** – 2016-17 Budget meeting
 - i. Item 2.6.1 Gas Major Project Implementation Team
 - ii. Item 2.7.2 Upstream Petroleum Resources Working Group
 - iii. Item 2.7.2 Land Access for Resources Working Group
 - b. **September 2016** Out-of-session agenda paper regarding transfer of GSS responsibility and funds from GMPIT to UPR
 - c. **11 November 2016** – Pre-Council meeting
 - i. Item 2.1.7 Gas Supply Strategy Implementation Update
 - d. **12 May 2017** – 2017-18 Budget meeting
 - i. Item 2(f) Gas Major Project Implementation Team
 - ii. Item 2(k) Resources Work Stream
 - e. **2 June 2017** – Pre-Council meeting
 - i. Item 13 Key priorities for Resources Working Groups
 - ii. Item 14 GSS New Collaborative Action Proposals
 - iii. Item 15 GSS Implementation - Progress Report on Implementation
 - f. **21 August 2017** – Teleconference
 - i. Item 4 GSS and GSS Implementation Plan
 - g. **3 November 2017** – Pre-Council meeting
 - i. Item 12(r) – Gas Supply Strategy – New Collaborative Actions
3. Energy Council agenda papers:
 - a. **19 August 2016**
 - i. Item 4.1 Gas Prices and Supply
 - b. **14 December 2016**

- i. Item 10 Gas Supply Strategy Implementation Update
 - ii. Item 13 Prioritising the Resources Agenda
 - c. **14 July 2017**
 - i. Item 13 Victoria's position on gas
 - ii. Item 14 Key priorities for Resources Working Groups
 - iii. Item 15 Gas Supply Strategy Implementation
 - d. **25 August 2017**
 - i. Item 4 Gas Supply Strategy Implementation Plan Amendments
 - e. **24 November 2017**
 - i. Item 14(o) Gas Supply Strategy Implementation
- 4. Victoria's advice to Energy Council Secretariat and UPR Secretariat regarding its future involvement in GSS Implementation, dated 22 May 2017
- 5. Minute for UPR meetings held on:
 - a. 22 September 2016
 - b. 30 March 2017
 - c. 16 May 2017
 - d. 24 July 2017
 - e. 12 October 2017
- 6. Minutes for LARWG/RPEWG meetings held on:
 - a. 25 August 2016
 - b. 1 December 2016
 - c. 4 May 2017
 - d. 5 October 2017
- 7. Minute for GWG meeting held on:
 - a. 14-17 March 2017
- 8. Minutes for RAP meetings held on:
 - a. 14 February 2017
 - b. 12 April 2017
 - c. 26 October 2017
- 9. RAP work plan 2017-18, dated April 2017
- 10. COAG Energy Council *Australian Gas Market Vision*, dated December 2014

External stakeholder consultation

The Steering Committee agreed to the Department of Industry, Innovation and Science engaging Duncan Rintoul from Rooftop Social (www.rooftopsocial.com) to facilitate both workshops. Facilitator costs were shared equally between the Commonwealth, South Australia and Victoria for the 27 February 2018 workshop. UPR and RPEWG Chairs approved the reallocation of unspent/uncommitted 2017-18 working group budget funds to cover the facilitator costs for the 11 May 2018 workshop.

Of the 34 organisations the Steering Committee identified and invited to participate in the consultation process, 10 organisations accepted the invitation. A full list of organisations

invited and participants that attended the workshop or participated via phone interview are listed below.

Stakeholders invited to participate:

- **Associations**
 - Association of Mining and Exploration Companies (AMEC)
 - Australian Petroleum Production & Exploration Association Limited (APPEA)
 - Australian Pipelines and Gas Association (APGA)
 - Chamber of Minerals and Energy of Western Australia (CMEWA)
 - Pastoralists and Graziers Association of WA
 - Queensland Resources Council (QRC)
 - Southeast Trawl Fishing Industry Association (SETFIA)
 - Western Australia Local Government Association (WALGA)
- **Gas companies**
 - Armour Energy
 - Arrow Energy
 - Beach Energy
 - Blue Energy
 - Buru Energy
 - Central Petroleum
 - Cooper Energy
 - Norwest
 - Santos
 - Senex Energy Limited
- **Local Councils**
 - Isaac Regional Council
 - Maranoa Regional Council
 - Western Downs Regional Council
- **Independent stakeholders**
 - AgForce
 - Central Land Council
 - Environmental Defenders Office ACT
 - Gas Industry Social and Environmental Research Alliance (GISERA)
 - Landcare
 - National Energy Resources Australia (NERA)
 - National Farmers Federation
 - NSW Land and Water Commissioner
 - North Queensland Land Council
 - Northern Land Council
 - Queensland Gasfields Commission
 - Queensland South Native Title Services
 - World Wildlife Fund

27 February 2018, Sydney – UPR, RPEWG and GWG workshop

Name	Jurisdiction	Working Group representation
Chris Yeats	NSW	GWG Chair & Steering Committee member
Kevin Ruming	NSW	UPR
Anthony Hurst	VIC	UPR & Steering Committee member
Alix Ziebell	VIC	<i>Support for UPR member</i>
Matthew Andrew	QLD	Steering Committee member
Jeffrey Haworth	WA	UPR, RPEWG & Steering Committee member
Ben Waining	TAS	UPR & Steering Committee member
Victoria Jackson	NT	UPR & Steering Committee member
Elinor Alexander	SA	Stood in for UPR Chair
Andrew Barrett	CWTH (GA)	UPR
David Turvey	CWTH (DIIS)	Steering Committee Chair
Michael Sheldrick	CWTH (DIIS)	Steering Committee member
Kathrine Riley	CWTH (DIIS)	UPR Secretariat
Harini Epa	CWTH (DIIS)	UPR Secretariat
Algis Kusta	CWTH (DIIS)	RPEWG Secretariat
Trinity King	CWTH (DIIS)	RPEWG Secretariat
Rhyann Gardner	CWTH (DIIS)	<i>Offshore Resources Branch support for UPR member</i>

11 May 2018, Canberra – External stakeholder workshop

Name	Organisation	Position (role)
Damien Dwyer	Australian Petroleum Production & Exploration Association Limited	Director, Economics
Andrew Robertson	Australian Pipelines and Gas Association	National Policy Manager
Carolyn Collins	Gasfields Commission Queensland	CEO
Prof. Damian Barrett	Gas Industry Social and Environmental Research Alliance	Executive Director
Warwick Ragg	National Farmers Federation	Manager for Natural Resource Management
Andrew Barger	Queensland Resources Council	Policy Director, Economics and Infrastructure
Michael Sheldrick	Department of Industry, Innovation and Science	Steering Committee member (technical expert)

Kathrine Riley	Department of Industry, Innovation and Science	UPR Secretariat (scribe)
Olivia Bailey	Department of Industry, Innovation and Science	UPR Secretariat (scribe)

Independently facilitated, one-hour telephone interviews were offered to organisations that were unable to attend the external stakeholder workshop during the week commencing 14 May 2018. For consistency and continuity, Rooftop Social led the discussion and the UPR Secretariat provided scribing services. Feedback collected via this method for the Steering Committee's consideration was received from:

Name	Organisation	Position
Neil van Drunen	Association of Mining and Exploration Companies	Policy Officer
Gary Rinehart Millicent Bradley Woods	Isaac Regional Council	Senior Advisor, Office of the Mayor and CEO
Tyson Golder	Maranoa Regional Council	Mayor
Francis Norman	National Energy Resources Australia	General Manager Innovation and Strategy